

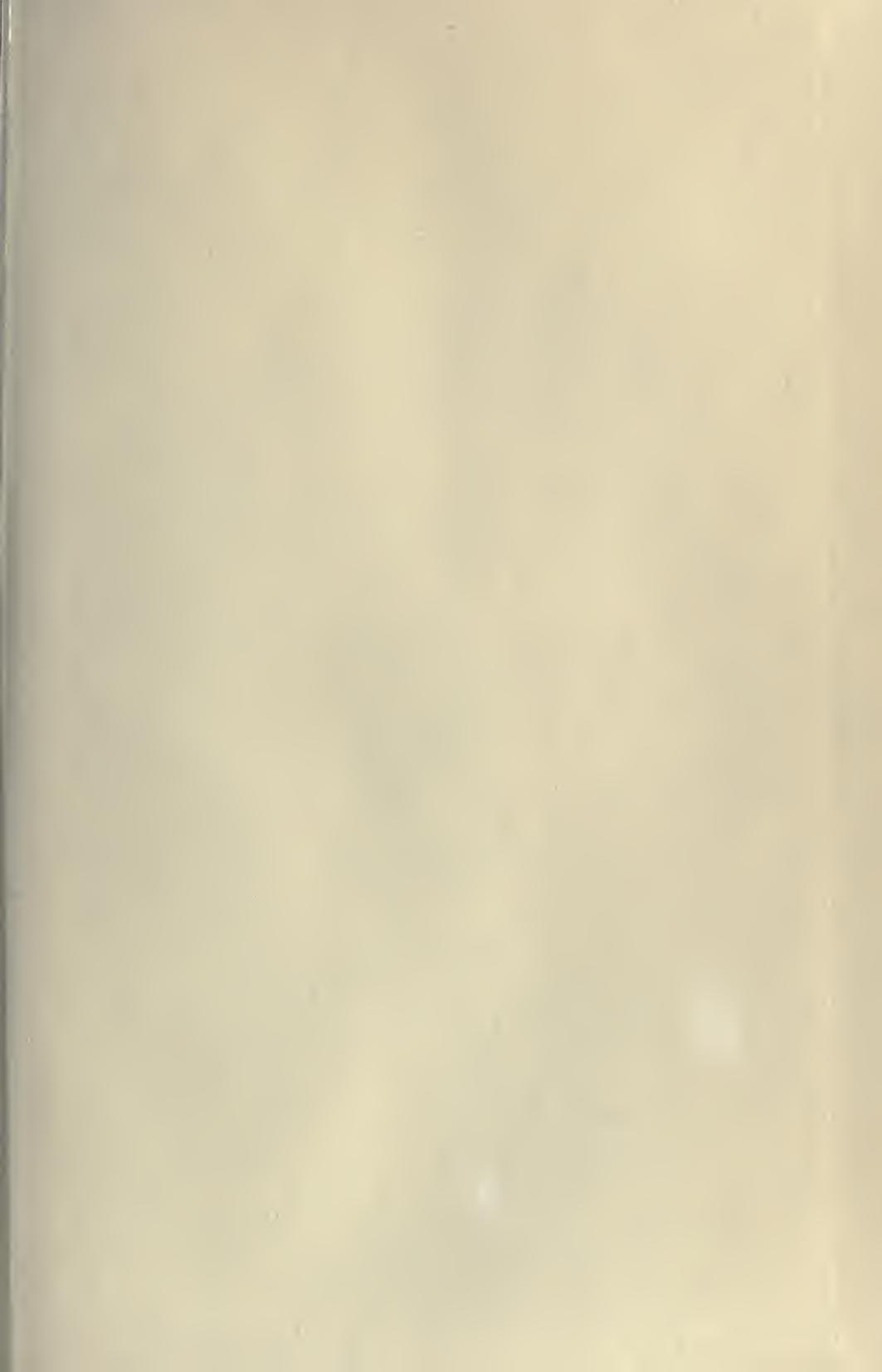


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THE
PRINCETON
REVIEW.

By Whom, all things; for Whom, all things.

FIFTY-SIXTH YEAR.

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THE POSITION OF ENGLAND IN THE EAST.

THE solidarity of civilized nations is now so established a fact, that no apology seems to be needed for introducing into the pages of an American Review a discussion of the problem which now confronts England in the East, and upon the solution of which her prosperity and even her very existence as a Great Power would appear to depend. As in the infancy of the Christian community it was noted that "when one member suffered, all the members suffered with it," so in the federation of nations, already to some extent a *fait accompli*, what injuriously affects one affects all—a single nervous system thrills throughout the entire body politic—and the well-being of England could not receive a blow without the effects being felt in much serious injury to interests of various kinds upon the opposite side of the Atlantic.

Taking the broadest view possible of the position of England in the East, and of all conceivable solutions of the problem involved in it, we have to begin by admitting that, logically, two grand alternatives present themselves to the mind for consideration, viz., (1) the maintenance of the existing state of things until it passes gradually into something stabler and better; and (2) the withdrawal altogether from the responsibilities and duties undertaken, the evacuation of Hindustan by the British forces and the British Government, the delivery of India's future into its own hands, and complete retirement of England from the position which she has assumed and still occupies.

The latter alternative is not, as might perhaps be thought, a mere logical conception, a possibility to be admitted in reason-

ing and then put aside altogether—it is a solution which has advocates in England, not very numerous nor influential ones, it is true, but still a certain number of sturdy and determined advocates—persons who mean what they say, and would act upon their theory if they had the chance of doing so. Their conviction has found expression in the pithy and pregnant phrase of “Perish India!” which some years back was made the watchword of a small sect of philosophic politicians, chiefly of the economical school, and which, echoing through the country from end to end, strangely stirred the hearts of the British people, and produced a very strong and decided reaction. At present, altho there is no reason to believe that those who raised the cry have changed their minds, yet the public sentiment has so clearly and unmistakably pronounced itself in a contrary sense, that, practically speaking, the view may be said to be in abeyance, the policy of withdrawal to have no active advocates. It is now seen and felt almost universally, first, that we have obligations to our own countrymen settled in India which make withdrawal impossible ; next, that we have obligations to the various native races, especially to those who have been the most friendly to us, which we cannot renounce ; thirdly, that our name and character, our *prestige*, and so our power, is bound up in the maintenance of our Indian Empire, and would suffer irretrievably by its loss. We could afford to give up the Ionian Islands to Greece, because they were so small a matter, and Greece so weak, that our motives could not be misconstrued—tho even that small retrocession was thought by some Continental statesmen to indicate that we were “a declining power”—we cannot afford to give up our Indian Empire, which is “the proudest monument of the political genius of the English race,” which increases our population five-fold, doubles our trade, widens immeasurably our ideas, our interests, our links with the future and with the past, and which certainly in the eyes of other civilized nations constitutes one of our main claims to be viewed as among the very first of existing political powers, and entitles us to take rank by the side of Rome herself in the history of the world. We can still less afford to do so from the certainty that, however we might protest against

the notion, our retirement would be universally ascribed to a consciousness of inability to maintain our position.

An additional bar to the step suggested was created three years ago by the assumption on the part of her Majesty Queen Victoria of the style and title of "Empress of India," amid a vast flourish of trumpets and an amount of self-glorification that was in thoroughly bad taste. A nation would cover itself with ridicule which should follow up such a proceeding as this with the abolition of the title assumed and withdrawal from all the responsibilities implied in it.

Practically, therefore, it must be said, that, in the eyes of the British nation, and indeed of all reasonable men, the alternative of withdrawal from India is an impossible one, and may be treated as non-existent. For weal or woe, for good or evil, for honor or dishonor, the connection between the two countries must be maintained, the dominion must be upheld: excepting at the point of the sword England must refuse to evacuate the position which she holds in Asia, and must spend her last shilling and sacrifice her last man to retain it.

Thus much premised, we enter upon the question of what that position is, what are its difficulties, and in what way its maintenance can best be secured under existing circumstances.

And first, let us confine our attention to the two countries which are the chief factors in the problem before us, the British Islands on the one hand, and the peninsula of Hindustan, or "Hither India," on the other. What is there peculiar or abnormal in their existing relations? What is there that should create any "difficulty" at all in those relations simply continuing unaltered for any given period? What is there, finally, that should constitute that "difficulty" so grave a one as to demand the best attention of all British politicians, and to render its discussion and consideration a matter of interest to the entire civilized world?

The government of large transmarine dependencies by a distant foreign country is no new or unheard-of thing in the history of the human race. Carthage for several centuries bore rule over Sardinia, Western Sicily, the Balearic Islands, and great part of Spain, tho her own proper territory was confined within the small space known in modern geography as

the Beylik of Tunis. Rome, long before she became possessed of the Isthmus of Suez, maintained an African dominion which embraced Tripoli, Tunis, and Algeria. Genoa and Venice in the middle ages held, respectively, for a considerable period, large territories only to be reached by sea, while each of them was confined at home to a small corner of Italy. Spain and Portugal in more recent times had Transatlantic possessions of enormous extent, which they held for nearly three centuries, and which seldom gave them much trouble.

But no one of these instances, nor even that of Holland at the present day, which is far more near, constitutes anything like a parallel to the case before us. England, with an area of 122,000 square miles, has taken possession of a territory estimated to contain 1,484,000 square miles, or one more than twelve times as large. With a population of thirty-three millions she has undertaken to govern and control a population variously estimated at from a hundred and eighty to two hundred millions.¹ These two hundred millions are not savages, not ignoramuses, not weaklings, but the inheritors of an ancient civilization, far advanced in many of the arts, familiar with the use of modern weapons of war, and containing among them many races of first-rate military qualities. England has obtained her dominion almost wholly by conquest, dispossessing of power those to whom it had descended from their ancestors for at least several hundred years, and who set as much store by the exercise of power as any known people of any time or any country. She is, in her religion, in her habits, in her language, in her blood, either absolutely alien from the races which she has undertaken to rule, or so nearly alien as to be viewed by the races themselves with instinctive and extreme aversion. She has colonized the country only to an infinitesimal amount; and tho her colonists, who have transferred their capital and their families to a remote region with her sanction, or at least with her connivance, have claims upon her, which cannot be ignored, for support and protection, and would seriously tie her hands in case of insurrection, yet they are too few to make

¹ In the *Quarterly Review*, vol. cxxxviii. p. 347, the population is estimated at "nearly 300 millions," but the 200 millions of Mr. Froude (*PRINCETON REVIEW*, May, 1878) is probably nearer the mark.

any appreciable addition to her strength, and could scarcely be counted on to raise a regiment if danger threatened. Above all, England does not really hold under her own sway, as many even well-informed persons imagine, the entire compact mass of the peninsula ; there lie interspersed among her territories a number of native states, some wholly independent, some (as the phrase is) "protected," but all really outside the sphere of her rule, secretly or openly jealous of her power, and requiring to be watched continually as weak points in the existing Indian system, points where disturbances may any day break out, and a movement originate of which no one could calculate the consequences. Her position is geographically like that of Prussia, while the North German Bund was still intact, and Saxony, Hanover, Mecklenburg, Hesse Cassel, Hesse Darmstadt, etc., the *enclaves* within her territorial limits, were separate and independent states, generally no doubt dominated by her influence, but liable at any time to take up an antagonistic position, never wholly to be depended on, often the cause of serious anxiety and even alarm. It is as if, in the United States, Georgia, Tennessee, Ohio, Maine, Vermont, Arkansas, were independent and self-governing communities, each with its own army, its own laws, its own fiscal system, and the American government possessed merely a certain amount of influence in these states, advised them, admonished them, and had to keep itself always prepared, in case of necessity, to coerce them.

And here let it be remarked that such coercion, tho it may seldom have to be put in force, has always to be borne in mind, and the means for making it effectual, should the occasion for employing it unhappily arise, have to be permanently provided. One of the main difficulties connected with the government of India is the financial one. India has never yet succeeded in paying the cost of her administration, and so her debt is continually on the increase. The main charge upon the revenue is the sum necessary to keep up the armed force ; and the amount of this force has to be determined, not so much by the needs of frontier defence, or the numbers wanted for the preservation of internal order in British provinces, as by the consideration of the strength required to keep in check the armies of the native princes. India, it has been recently shown,

maintains a total of about half a million soldiery, something more than three fifths of whom belong to the native princes. Roughly one may say that the British Government in India has to keep up a force of nearly 200,000 men, *because* the native states choose to maintain armies amounting in the aggregate to 300,000.

These native states, then, situated within her borders, constitute one of the main difficulties of the position of England in Asia. It might be easy, no doubt, to pick quarrels with the states severally, and within a certain space of time to conquer them and annex them. It would be a happy change for the populations of the states, and a grand thing for civilization and good government generally. A thousand cruel tyrannies would be crushed, ten thousand nameless crimes brought to an end, a boon conferred on the inhabitants of the countries which can scarcely be adequately estimated. But the hands of England are tied by her engagements. With whatever conviction the cry of "perfidie Albion" has been raised from time to time by England's nearest neighbor, the fact is that England, unlike Rome and most conquering countries, does feel herself fettered by treaties; has even the weakness to let herself be actuated by gratitude; and will for long years be precluded from bringing India generally under her yoke, by the stipulations of the treaties which she made in bygone days with the states in question, and by the obligations under which several of them laid her at the time of the great mutiny. An additional force was attached to these obligations by the terms of Queen Victoria's proclamation as Empress of India, when a pledge was given that annexation should thenceforth cease, and that the entire independence of the existing native states should in the future be strictly respected.

England's difficulties, as we have said, are greatly aggravated by the existence of the native states within her borders, which need constant watching, require the most judicious management, largely augment the cost of her Indian administration, afford a refuge for criminals, and maintain an image of freedom and independence before the eyes of the subjugated

races that awakens their regrets, keeps alive a spirit of discontent, and so endangers tranquillity. But this is not all. Even apart from the existence of these states, even were they one and all absorbed, the task of ruling India would still be no easy one. We are utter aliens from those over whom we rule. Three barriers—the religious, the linguistic, the social—separate us. We have done but little towards removing these barriers since we occupied the country. They still exist, and two of them at any rate—the religious and the social—remain almost in their original force.

When the conditions of the problem are fully presented before the mind ; when it is seen that England, with a population of thirty-three millions, undertakes to hold in subjection a population of two hundred millions ; that of these two hundred millions all but a mere handful are aliens in religion, language, and blood ; that fanaticism is rife among them, and the yoke of an infidel race detested ; that there has been no fusion of the conquerors with the conquered, and not even any approach made generally to free social intercourse ; that native states have been allowed to continue side by side with the subjected districts and intermixed with them ; that these states, with their independence, have been permitted to retain their several armies ; that these armies conjointly exceed in number very considerably the military force maintained by the British Government ; that that military force itself is composed of native troops predominantly ; that England lies at a distance of seven thousand miles from the nearest point of the Indian peninsula, and cannot send reinforcements to her Indian army in less time than a month or six weeks ; when this condition of things is understood and realized, the wonder is at once seen to be, not that the situation should be felt to involve difficulty and perhaps danger, but that England's domination over India should be maintained for a month, for a day, for an hour ! The state of things which we have shown to exist might have been expected to issue in chronic rebellion or revolt—it might have been supposed that scarcely a year would pass without an outbreak. In fact, India has enjoyed for above twenty years absolute and entire tranquillity ; there has been neither trouble nor threat of trouble excepting upon the borders. Two hundred

thousand soldiers—more than half of them natives—have maintained internal peace, and at the same time guarded the frontiers effectively—there has been no collision with any of the native states—a guilty prince has now and then been arrested, but without armed conflict—and if the soil is volcanic, at any rate the volcano has slept ; and not only has there been no eruption, but even the cloud that usually floats over lava fires has sunk down and disappeared.

It follows to consider how this effect has been produced. What is there in the circumstances of India, and of the British position there, to set against the disruptive forces above enumerated, and so far forth to neutralize them that, hitherto at any rate, there has been but one attempt made to shake off the British yoke, and that attempt a brief and thoroughly abortive one ?

In the first place, there is the great and patent fact of the ethnic and religious diversities which sever the native population of India into distinct sections, intensely jealous of each other, and under ordinary circumstances more mutually hostile than averse to a dominion which presses on all alike. The Hindoos hate the Mohammedans ; the Mohammedans reciprocate the feeling, if not with an equality of bitterness, yet with a hatred which contains a large element of contempt. The Sikhs regard Mohammedan and Hindoo with nearly equal dislike, but their aversion to the former is tinged with fear, and is therefore somewhat more intense. The Dravidian " Hill Tribes" cherish an especial hostility towards the Hindoos ; the Parsees despise all, but particularly abominate the Mohammedans. Only in a very rare and peculiar combination of circumstances would it be likely that even any two sections of the population would be induced to combine in an effort to bring British rule to an end ; and then the other sections might be relied upon to take the opposite course. When the strange myth of the " greased cartridges" united the two main races—the Mohammedans and the Hindoos—against us, the Sikh population immediately rallied to our side, and was ready to furnish whatever number of men was required to put down the mutiny.

Secondly, there is the further fact that the Hindoo nationality, which forms considerably more than half the population

of the peninsula, is for the most part of a remarkably quiet, gentle, and unwarlike temperament. Tho not wholly devoid of military qualities—for it fought bravely against Alexander, it offered a considerable resistance to the Mussulman invaders, and it still furnishes the bulk of the recruits required to keep up the strength of our native regiments—yet it is on the whole peaceful, unambitious, unenterprising. It contains no doubt a certain number of unquiet and discontented spirits—men of the temper of Nana Sahib—who, given an opportunity, would rise against the Government, and if the struggle once began, would carry it out to the bitter end, exhibiting in their conduct at once the cunning of the fox and the ferocity of the tiger, and quite prepared to suffer death if they failed of success: but beyond all question the number of such men is few. In the country districts they scarcely exist: in the towns they form a small and ever decreasing minority, since the wisdom of the Government, which has opened the civil service to natives, drafts them off into its own ranks, and turns them from enemies into supporters. This metamorphosis may not take place in all instances; but it is certainly of frequent occurrence; and the unquiet element in Hindooism is in this way continually diminishing, the proportion of educated Hindoos who are content with things as they are, tending constantly to become greater.

Add to this that the Hindoo race is conscious of weakness. It was at no time one of those on which nature has set a stamp of superiority, and which she has marked out for high and great destinies. We must attribute its original conquest of the peninsula rather to the excessively low standard of physical and intellectual power in the tribes which it subjugated, than to any high development of mental or bodily vigor in itself. Climate, moreover, was against it; and within a few generations of the time when, bursting from the mountain barrier in the northwest, it spread over the vast Indian plains, such vigor as it had originally possessed was sapped, and the race became effeminate and weak. It offered itself a ready prey to conquerors. We may dismiss as fables the Indian conquests of Ninus and Semiramis, of Thothmes and Rameses; but history shows that from the time of Darius Hystaspis, at any rate, there was never an invader of the region that did not find it easy to impose his

yoke on the gentle and apathetic Hindoos. Persians, Greeks, Bactrians, Scythians, Mongols, Turks, Afghans, Englishmen, had only to make their appearance in moderate force, and subjugation was the almost immediate consequence. Sometimes a decent resistance was made ; but, except in the case of the Mahratta power, no native monarchy was able long to maintain itself or to acquire any considerable reputation between the time of Chandrakupta (B.C. 300) and that of Hyder Ali (A.D. 1770). Even the Mahratta power, the sole indication of military and political vigor which the history of the Hindoos offers in the space of above two thousand years, had but a brief existence, perishing through internal divisions after the space of about seventy years. Modern Hindoos have few traditions of national glory, or even of a satisfactory state of independence. It is sixty years since the Mahratta power was crushed. The bulk of the Hindoo race has almost forgotten that they were ever their own masters, and entertains no nobler aspiration than the wish to live quietly and to enjoy the fruits of their labors.

There is further a general feeling among all classes, and all sections of the population, that the British *raj* has merits which entitle it to respect, and that it is at least questionable whether any other which might replace it would not be found to be a greater grievance, more generally disagreeable and oppressive. No one in India doubts that the existing administration of justice is pure, or entertains a suspicion that the civil magistrate will favor the rich rather than the poor, the powerful rather than the weak, or his own countrymen rather than the native of whatsoever race. No one suspects the officials of peculation, of taking bribes, or of unfairness in the assessment of taxation. Orientals readily appreciate even-handed justice, and are wont to admire a virtue which they are conscious that they could never practise. They feel, moreover, that the English rule is tolerant. Every previous government of which they have any recollection has persecuted to the utmost of its power and endeavored to crush out obnoxious religions. The British Government alone has done nothing of the kind, but is even ostentatiously impartial in the attitude which it holds towards the various creeds of the country. It is quite understood that in

putting down suttee, infanticide, and other similar practices, the government has been guided by political and not by religious motives. Mohammedan, Hindoo, Sikh, Parsee, Buddhist, alike feel that they can depend on the entire abstention of all British officials from attempts to proselytize, or indeed to interfere in any way with the religious opinions of those whom they govern.

Thus, partly from inertia, partly from disunion, but perhaps mainly from a doubt whether they would improve their condition by an outbreak, the population of India—as a whole—remains tranquil and acquiesces in the British rule. Petty disorders and occasional crimes alone indicate the smothered discontent. Now a fanatic murders a Governor-General, or a native corps, employed on a service which it dislikes, under cover of an engagement with the enemy shoots some of its own officers ; anon, there is a Dacoitee disturbance, and a bold bandit attempts to obtain a following by assuming the style and title of "Sivaji the Second." These, however, are little matters ; no general rising occurs anywhere ; the spirit of rebellion sleeps ; and the ordinary observer might imagine, as he does when he walks upon the flanks of Etna, that all was assured and safe ; but the Indian *habitué* is of a different opinion, and will tell such an observer to distrust appearances, and warn him that

" incedit per ignes
Suppositos cineri doloso."

Such, in outline, is the general condition of India under British rule, and such are the primary dangers and difficulties of the position which England occupies in Asia. Ethnic difference, religious antagonism, social isolation, the natural repugnance of the conquered towards their conquerors, produce a state of tension and general uneasiness which is to some extent allayed and kept in check by the respect in which the conquerors are held, by an approval of the principles on which they rule, by a fear of the consequences of revolt, and by a doubt whether even in case of success any better state of things would be inaugurated. These difficulties would, even by themselves, be great. They would render the government of the peninsula no easy matter, and would prepare for those who have to ad-

minister it no bed of roses. But there is a circumstance in the present condition of affairs—a circumstance newly arisen—which aggravates them a thousandfold, which renders the existing problem one that it requires the highest statesmanship to solve—and that will probably occupy the main attention of the best class of practical English intellects for the next half century. This circumstance is the progress of the Russian power in the East, which introduces a new factor into the problem, augments its difficulties incalculably, and renders it of the utmost consequence that the entire British position should be reviewed, its weak points remedied, its strong points strengthened, and preparations made to meet and confront the new peril, which aggravates all the old ones, and is of itself, even apart from them, sufficiently formidable.

Forty years ago "a broad zone of above twenty degrees of latitude"—nearly 1400 miles—"peopled by strong and independent races, intervened between the most northern districts of India and the most southern settlements of Russia."¹ The great wilderness of the Kirghiz-Kazzaks, extending for two thousand miles from east to west, and for one thousand miles from north to south, and impassable except to a well-appointed caravan, at certain seasons and along certain routes, seemed placed by nature as an insuperable barrier between the Cossack hordes of the north and the fertile regions east of the Caspian Sea, which are the outlying bulwarks of India, and must be jealously guarded by any power which aspires to maintain quiet possession of Hindustan. The case is very different now. By a series of aggressions, for many of which there may have been great excuse, but of which a certain number have been wholly unprovoked, Russia has absorbed three fourths of the intermediate zone, and has brought herself within such a distance of India that she has to be regarded as almost a conterminous power. England also, it must be allowed, has made some important movements in advance of her position in 1838; and it is by the combination of the two advances—that of Russia towards the south, and that of England towards the north and north-west, that the zone has been narrowed, and the existing condition of affairs brought about.

¹ Sir H. Rawlinson, "England and Russia in the East," p. 139.

Russia is a military power of first-rate strength. She possesses more than half of Europe and a third of Asia. She has a population of from seventy-five to eighty millions. She maintains a permanent armed force not far short of a million of men. She can transport her troops without fatiguing them, by means of railways and steamers, from the Baltic provinces to the banks of the Oxus and Jaxartes. She has inexhaustible supplies of corn on which to feed them. Her troops possess many excellent military qualities. They are brave, firm, well disciplined, hardy, ready to die for "Holy Russia." They never murmur. They will follow wherever they are led, tho they may be a little deficient in dash. The scientific corps are excellently trained, and unsurpassed by those of any nation. No prudent statesman will ever go into a war with Russia "with a light heart;" no general, whatever troops he may command, will despise a Russian force of equal numbers to his own, or engage them without some doubt as to the result. It will be altogether a new thing for England, and a most serious thing, to have to keep watch, not only upon the native Asiatic powers within and without her borders, but upon a neighboring European power, placed just a little beyond her borders, possessed of a huge disciplined army, furnished with all the latest scientific appliances, and led by skilled generals, trained in the best of all schools—that of actual warfare. England need not perhaps fear defeat if she keeps her eyes open to the danger which threatens her, and calls upon her reserved strength; but she must make up her mind for earnest and sustained efforts such as she has not been called upon to make for many a long year.

The nature of the Asiatic temperament renders the appearance of a second European power upon the scene peculiarly awkward and inconvenient. Asia is agog for change. *λέγεται τι νανύόν* is ever the cry there. Conscious of their own weakness, and of the necessity of their depending in any struggle upon extraneous aid, the Asiatics cast about, with an anxiety that is almost pitiable, for some strong foreign *point d'appui*, which may become the pivot of their enterprises and manœuvres. In every bazaar in India and the adjacent countries the most interesting topic for discussion during the last forty years has been the relative strength of the two great Euro-

pean powers with which alone they concern themselves, England and Russia. The long course of constant aggression and unvaried success which has marked Russia's career in the East since 1847 has raised that power in their eyes to a most commanding position, and has impressed on millions the conviction that to Russia belongs the promise of the future. Nowhere else on the earth's surface are men so keenly set on observing the signs of the times, and taking for the chief guiding principle of their conduct the desertion of the setting and the worship of the rising sun. Ever since Russia began her advance upon Central Asia—that is, ever since 1847—the eyes of India, Afghanistan, Persia, Chinese Tartary, have been riveted on her movements, and at each advance of her frontier the conviction has gained strength that she is the power destined to hold the first place in the Oriental world, and that England will have to content herself ultimately with playing a mere secondary part. Hopes and fears, expectations, apprehensions, wild longings, guilty dreams, stirred into life by the course of events, have taken possession of the minds of thousands, and a vague disquiet, the precursor of revolutionary change, broods upon the greater portion of the Asiatic Continent. Men see in imagination the Cossack and the Sepoy engaged in deadly conflict upon the Oxus or the Indus, and tremble or rejoice at the near prospect of a time when all the restraining forces that now rule the East, and keep things as they are, shall be shattered and destroyed, and society being upheaved by volcanic energies of unknown strength, a general confusion shall prevail, and each individual find himself at liberty "to do that which is good in his own eyes." The ambitious and the enterprising discern, or think they discern, in a general scramble the opportunity for getting a name, or even for carving themselves out principalities with the sword ; those actuated by mere vulgar greed trust in a time of war and havoc to better their fortunes by means of rapine. India has the character throughout the East of being a country where untold wealth in gold, and diamonds, and pearls, and precious stones of many kinds, accumulated during centuries, awaits the hand of the despoiler. The prospect of "looting" Lahore, and Delhi, and Benares, and Calcutta, and the other great towns, constitutes an irresistible attraction to every un-

quiet spirit between the Caspian and the Irawady ; and the difficulties of England's position in India are enormously increased by the almost universal feeling of unrest and expectancy which the rapid progress of Russia and her uncheckered career of success have generated in Central and South-Western Asia.

To the Oriental imagination Russia presents herself as even a greater power than in reality she is ; and this, not only from the well-known tendency of Easterns to exaggerate, but from the fact that the points which constitute her greatness are such as they can well appreciate and conceive, while those in which her weakness consists are either beyond their cognizance or such as they have not the faculty to estimate aright. The enormous area over which the dominion of Russia extends, her vast army, her large population compared with that of other European states, her restless ambition, her unscrupulousness, her success, are facts which they can take in, and to which they attach perhaps an undue value : her difficulties from want of roads, from internal corruption, from the discontent of conquered populations, Poles, Circassians, and others, and from the revolutionary element among her own masses, which has in the last year or two shown itself so unmistakably, are partly unknown to them, partly beyond their powers of appreciation. The result is that Russia looms before them, magnified beyond the reality, through the mist and haze of half-knowledge and indistinct conception ; and a gigantic form, which is one half the creature of their own imaginations, occupies their minds and dominates their intelligences, tempting them to fall down before it and worship it, when, if they could see the Empire as it is, and form an accurate estimate of its strength and weakness, they would feel towards it very differently.

In the present position of affairs, Afghanistan is all-important, partly on account of the character of the people, partly on account of the geographical position and the natural advantages of the country. Afghanistan has an adult male population of above a million, all born soldiers. There is no material in the world out of which better troops could be made than the Afghan tribes, if they were disciplined upon the European model. England could not afford to allow this excellent recruiting ground, the

best in the whole of Central Asia, to fall into other possession than her own. But, apart from this, the position of Afghanistan is such with respect to India, that no power holding India can be indifferent as to its occupation. There have been seven conquests of India in historic times ; and six of them have been effected from Afghanistan by those who had previously occupied that country. The Persians, the Greeks under Alexander, the White Huns or Scythians, the Sultans of Ghuzni, the Mongols under Timur, the Turks under Baber, all entered India from Afghanistan, obtaining their access to it in this way, and finding the conquest, comparatively speaking, easy, when the Afghan territory was once mastered. The resources of Afghanistan are considerable ; its fertile valleys numerous ; its climate good. The power which has possession of it can nurse its strength in regions which offer enormous difficulties to an invader, and choose its time and place for striking its blows, remaining itself in almost perfect security. Public writers often assume that there are but two, or at most three, passes from Afghanistan into the valley of the Indus, and declare that it would be easy to watch the Khyber, the Bolan, and the Gomal, and prevent troops from issuing from them : but the truth is that in the long course of the Suliman range, which runs parallel with the Indus for nearly three hundred miles, there are not three passes only, but thirty ; and armies stationed to block the Khyber, Bolan, and Gomal would be as easily taken in the rear by troops debouching from passes of less notoriety, as the Turks were on the south side of the Balkans in the spring of last year. There are always scores of routes by which a mountain range can be traversed ; and an invader from Afghanistan can mass his troops where he pleases within the line of the hills ; make a feint of attack here and another there ; while he finally swoops down and delivers his blow from some unexpected point and in some unguarded quarter, thus almost certainly obtaining the *prestige* of the first success, which in the East is very much more than "half the battle." Afghanistan in the hands of a weak power, its tribes at variance among themselves, its troops undisciplined, its ruler held in check by rival chiefs of almost equal authority, is one thing ; but Afghanistan in the hands of a strong power, its resources made the most of,

its tribes coerced into harmony, its army drilled by Europeans and commanded by Europeans, its chiefs one and all overawed by the shadow of a despotic throne, and content to be mere puppets in the hands of a Kaufmann or a Llamakin, is quite another. In the former case she is an unpleasant neighbor, always giving trouble and requiring to be watched ; but still she may be borne with. In the latter, she would constitute a perpetual danger and menace of the gravest kind ; she would be a thunder-cloud upon the Indian horizon that would portend almost immediate storm and tempest ; she would require an army of 200,000 along the line of the Indus to keep her in check, and would bring India in the course of half a dozen years to financial ruin.

It was impossible, therefore, that English statesmen should acquiesce in the arrangement which placed Afghanistan in the spring of 1878 under Russian vassalage. When the Russian mission under Stolietoff was allowed to establish itself quietly at Cabul, and the British mission under Sir Neville Chamberlain was positively refused permission to proceed, the Amir made it known far and wide through the East that he had broken with the English, and placed himself under the ægis of Russia for protection. To submit would have been to relinquish Afghanistan for ever, to bring Russia to our very doors, to give her quiet possession of what is really the key of our whole Indian position ; and it would have been, moreover, in the eyes of all Asia, to confess ourselves afraid of the Czar, to cede to Russia the first place in the Eastern World, and with it to cede the general direction of affairs on the Asiatic continent. This was a course which no British statesman was prepared to recommend ; and accordingly, with only a weak and half-hearted protest from the members of the Opposition, the government of Queen Victoria, in the summer of 1878, proclaimed war against Shere Ali, and marched an army into Afghanistan.

The question which all Asia asked upon this was, What will Russia do ? How will she act ? Few doubted that she must and would support her vassal, her puppet, her cat's paw. But how would she support him ? Would her columns be openly put in motion, and, advancing from the basis of the Caspian and the new province of Turkestan, enter the Afghan territory

at the call of Shere Ali, garrison Herat, Candahar, and Cabul, help to discipline the Afghan levies, and, together with them, meet the English in the open field, and fight for the mastery of the country? Or would she pursue a more tortuous but perhaps equally effectual course? Without becoming an open and confessed belligerent, would she simply let it be understood among her officers and her soldiers that they had her full permission to help the Afghans, if they so pleased, and would she thus encourage the formation of a Russian volunteer corps in Afghanistan, as she had done in Servia three years previously? Would she also secretly supply the Amir with ammunition, with arms of precision, with engineers and artillerists, and with —what is most important of all—the “sinews of war,” MONEY, giving him at the same time her moral support by maintaining her embassy in his capital and sending her secret agents to foment disaffection among the native races in India? Such a method of acting would have terribly embarrassed the Indian Government, and have made the Afghan war an affair, not of a single year, but of twenty. That Russia would take one of these courses was scarcely questioned in a single bazaar or court between the Caspian and the Bay of Bengal. But she took neither. With a meekness that is without a parallel in the whole course of her previous history, she bowed to the remonstrances of England against her interference with Afghanistan, withdrew her mission from Cabul, counselled the Amir to go down on his knees and beg England’s pardon, and, when he refused to follow her advice, having (as he thought) gone too far to retreat, left him to fight his own battle entirely by himself, sent him not a man, not a musket, not a rouble—nay, stood by impassive and unmoved while he suffered disaster after disaster, and finally allowed England to bring the war to a close in the way that she thought best, without opening her lips even to offer advice, much less to remonstrate or threaten.

Strange and abnormal as was such a course of proceeding on the part of Russia, the causes of it are not far to seek. The Turkish war had been an enormous drain on Russia’s resources in men and money. She lost in the course of it probably two hundred thousand of her best troops. She disarranged all her industries and incurred an immense debt. Moreover, she de-

moralized large masses of her soldiers, and turned them from submissive slaves into conspirators, by exhibiting to them, and allowing them to contemplate for months, the near spectacle of Freedom, freedom won for their weaker brethren by the strong arms and stout hearts of those who remained themselves enslaved, and had not even a distant prospect of attaining liberty except by revolution. She felt therefore, in the spring of 1878, quite unequal to the burden of a new war, quite unable to act with effect, at least until she had rested and recruited her strength. Being abnormally weak, she gave way for once. No doubt her idea was "reculer pour mieux sauter." She has no intention of giving way permanently. She will bide her time and choose her own method of reasserting herself. England, on the other hand, was quite aware of her rival's weakness, and took a higher tone, was more determined and *exigeante*, in consequence. Russia's difficulty was England's opportunity; and the reverse will doubtless be the case some day. The real elements of permanent strength in the two countries are too evenly balanced for a decided preponderance of the one over the other to be more than temporary. If indeed the revolutionary element in Russia should prevail, the case would be different; but we do not view its triumph as probable.

Meanwhile what has been the effect in Asia of Russia's desertion of her ally and submission to all the demands of England? In the first place, it has shown unmistakably to the Afghans on which side the present balance of power in Asia lies, and to which of the two great rivals it is best to trust. Shere Ali a fugitive from his capital, imploring of Kaufmann the material aid in dependence on which he had ventured to insult England, and imploring it in vain, left to languish on the frontier without an encouraging word, and dying at last as much of chagrin as of disease, is a figure which will not soon pass from the Afghan memory, and teaches a lesson that even the light Afghan temperament cannot easily forget. Yakoob Khan is not likely to forget it. The princes, his brothers, whom Russia perhaps hopes one day to put forward as pretenders to the Afghan throne, will scarcely forget it. They will "think twice" before taking irremediable steps in reliance on Russian promises, and "refuse to hear the voice of the

charmer," however sweet its tones are, knowing that the dulcet notes, like the songs of the Siren, are simple lures to destruction.

Nor will the effect of the lesson taught be limited to the Afghans and Afghanistan. Throughout Central Asia, wherever there is either the reality or even the shadow of a native court, at Teheran, and Khiva, and Bokhara, and Kelat, and Srinagar, and Katmandoo, as well as at Cabul, the conviction will be firmly fixed, until something new occurs to shake it, that no trust is to be put in Russian promises, no dependence to be placed on Russian aid. It is difficult to measure the amount of *prestige* which England must have gained, and Russia must have lost, in the East by the events of the last twelvemonth. There has been something so striking, so tragical, so complete, in the drama just played out—such a combination of unscrupulous intrigue, blind faith and infatuation, bold defiance followed by utter defeat and collapse, and then finally cynical indifference on the part of the tempter to the ruin wrought—that the imagination is mastered by it, the mind held captive, as it were, and engrossed.

Thus the position of England in the East has been considerably improved by the events of the last two years. There still remain the internal difficulties—the discontent of the subjected races because they are subjected, the social isolation, the religious antagonism, the intermixture of independent or protected states with tracts under direct British government, the huge native armies of the independent and protected princes, and the enormous military expenditure which these armies necessitate—but the external aggravation of all these difficulties from the position and attitude of Russia is less than it was, has been very sensibly diminished by what has recently happened. To the Orientals the star of England appears now to be once more in the ascendant ; their fear and admiration of Russia are not what they were ; they are inclined to hold back for the present ; to wait, at any rate, and see what time will bring forth ; not to commit themselves, or allow Russia to use them as her cats' paws ; to be on their guard against her advances. Some very important event must occur, some very bold stroke be made by Russia, and some great success achieved, or England suffer some very considerable reverse, before Russia can regain the position which she held in their thoughts two years ago.

Again, England has greatly improved her territorial position by the issue of the Afghan campaign. Lord Beaconsfield stated nearly a year ago that one of the main objects for which we had gone to war was the obtaining of a "scientific frontier." This object has been completely achieved. Our frontier has been advanced from the eastern to the western foot of the Suliman Mountains ; and the upper ends of all the passes are to remain in our hands. Nor is this the whole. Afghanistan passes by a formal act under our suzerainty, retaining her own ruler, her law of succession, and her internal administration, but putting her whole foreign relations entirely into our hands. We are to have the right of establishing British agents in all her important towns ; and, if need be, of placing troops in them to defend them from attack. For defensive purposes our frontier is thus advanced from the Indus to the Oxus, and we have an outer line of defence along the crest of the Hindu Kush and the Paropamisus, as well as an inner line along the Suliman range. If the relations established with Yakoob Khan can be maintained—if the tribes remain contented with his rule—we shall have every advantage that the entire possession of the country could give us, while we shall escape both the expense and the responsibility of its administration. We may have some troubles with the hill tribes along our western border ; but they can scarcely be worse, now that the hills have passed under our dominion, than they have been for the last thirty years, during which we have been forced to undertake more than twenty expeditions against them.

Still, it would be easy to overrate the permanent advantage to England of what has been recently accomplished. Russia has for the time suffered a severe check—her reputation has received a blow from which it cannot very easily or very quickly recover. She has been discredited throughout the East by her combined braggadocio and timidity, by the high tone which she took while the action upon which England would resolve was uncertain, and the rapidity with which she ate her words and "changed face" as soon as England had declared herself. But the very magnitude of the check which she has received, the very extent of her loss of reputation, will naturally lead her

to make ere long some great effort to obliterate the memory of her collapse and to rehabilitate herself in the estimation of the Orientals.

It is greatly to be desired that, ere affairs arrive at this pass, ere Russia and England stand confronting each other in Asia, each armed to the teeth, along the Afghan frontier, each moreover looking at the other as a deadly enemy and ready to fly at the other's throat upon signal given, diplomacy would give the situation its best attention, and elaborate, if possible, a *modus vivendi* for the two antagonists. Is not Asia large enough to furnish an ample field for the simultaneous action of two civilizing powers? Might not a line be drawn somewhere, and the two powers agree not to transgress it? Nature has assigned to Russia the north; to England, whose basis is the open sea, the south. If a "neutral zone" is an impracticable idea, or if at any rate the time is gone by for it, might not the two powers mutually engage not to interfere with each other's action within certain set limits? England cannot suffer her free communication with India, present or future, to be threatened by the intrusion of Russia into the southern regions, especially those towards the west, Turkey in Asia, Persia, Afghanistan. Russia could not submit to the occupation by England of the Uzbeg states or of Kashgar and Yarkand. In consideration of the terrible calamities that would be certain to occur if the two states came into hostile collision, if the one stirred up disaffection and mutiny throughout India, and the other set herself to arouse the barbarous fanaticism of the Uzbegs, might not an agreement be made? Would it not be practicable to take the great sandy desert, which stretches *almost* uninterruptedly from the south-eastern shores of the Caspian to the neighborhood of Pekin, as the natural boundary between the two empires, and to stipulate that Russia should have full liberty to develop herself to the north, and England to the south of this line? It is unhappily true that the desert is not continuous. A break of some six hundred miles occurs between Balkh and the neighborhood of Yarkand. One half of this, however, consists of high mountain and barren steppe, valueless, and almost uninhabitable, while along the greater part of the rest the river Oxus would furnish a marked and fairly sat-

isfactory boundary. If there were a desire for peace, if either empire would look upon its limits as sufficiently wide, and would set itself to the improvement and consolidation of what it has, rather than to the acquisition of what it has not, the friction along the line of the Oxus need not be very great. Commercial rivalry, a war of tariffs, must indeed continue, so long as Russia keeps up her ultra-protective system, and smuggling across the border will of necessity flourish ; but fiscal troubles of this kind need not lead to war. England has no aggressive designs against Russia ; and unless Russia entertains designs of this kind against the English rule in India, which she and her friends are never weary of denying, peace may well be maintained. It will contribute to maintain peace that England has greatly strengthened her military position by the results of the late Afghan campaign. It would render war madness, and peace a certainty, if by good government, by judicious expenditure, by well-considered reforms, financial and other, she could so conciliate to herself the affections of the natives as to make them all, or even the great mass of them, her attached subjects.

GEORGE RAWLINSON.

THE THEORY AND PRACTICE OF ELECTIONS.

SECOND PAPER.

IN the March number of this REVIEW I noticed the character of an election as a struggle for power. It is necessary to develop this observation somewhat in order to show the error of the analogies which are often drawn between elections and lawsuits, and to define the true province of law and of courts in regard to elections. The too great predominance of professional lawyers in political functions is one cause for the confusion which is common on this point.

(i) An election is a struggle to determine who shall possess and administer political institutions, impose burdens and duties on the citizens, decide what conceptions of rights shall be adopted and how they shall be guaranteed, define the qualifications for participation in political privileges, and wield the FORCE of the state to give practical effect to their will on these points. I put first the power to impose burdens and duties, because the most valuable power for the governor is that of deciding the duties of the governed. He thus decides what others shall do for him. I put as the culmination of political power the authority to dispose of the force of the state because the last resort is to force, and then the moral advantage of having legal authority to use force is invaluable. The true analogy for the struggle involved in an election is war; but if any analogy were to be sought inside the peaceful experience of a civilized state, it would be in the struggle of two persons who are forming a contract, each of course seeking his own advantage in the stipulations. Now law and courts interpret contracts if disagreements arise as to their meaning after they have been made. We cannot make a law that a man shall enter into any contract, nor determine by law the stipulations of any

contract. We can determine what his duties shall be if he enters into a certain status (*e.g.* marriage), but we cannot rule that he shall enter into that status. Now an election belongs to the primitive and formative stage, which is analogous to the formation of a contract, and like all the primitive and formative acts of human social life it bears in it the marks and character of the original struggle and competition which nothing can ever do away with, however much we may regulate and soften it. Legislation stands in three different relations to different parts and stages of the election institution.

(a) Legislation does not reach the party machinery—committees, caucuses, and conventions—at all, and the courts can afford no redress for grievances or violated rights which arise from the action of these organs. These organs are all voluntary and extra-legal, and it is interesting to see the queer form which the original “fist-law” puts on in these organs when, on account of manners and morals acquired in other relations of life, it is forced to masquerade in the phrases and the code of modern life.

(b) Legislation defines the qualifications upon which one may have the right to vote, and it defines the criteria by which the result of the election shall be determined, and by which the right to possess and use political power shall be adjudged. Here are two rights defined. Courts can administer the laws mentioned and can give the rights. But what does giving the right mean? A. B. claims the right to vote, and shows that he possesses the qualifications. The right is adjudged to him. Does that mean that the court shall send an officer with him to see that he votes? Certainly not, since others might claim the same support, and who would be officers and who voters? Suppose then that, upon the order of the court, all persons withdraw hindrance of every kind, and the ballot-box tenders and ticket-pedlers stand like statues while A. B. exercises his right. A. B. perhaps cannot read, and cannot distinguish the ticket he has decided to put in from the other, and he cannot tell into which of a half-dozen boxes which of a half-dozen tickets is to go. How then is he to get his right? Against whom is his right good? If “help” is offered him from one side, help must be offered him from the other, and so we are

back at the beginning again. He is, as a matter of fact, dependent upon his fellow-men, which means that he is more or less at their mercy in trying to do what he is not competent to do, and what, therefore, in the philosophy of society and the state, he has no "right" to try to do. Legislation, in this sphere, therefore, can only proceed on assumptions, recognize facts, and provide for the production by social forces of such results as they are capable of. The error of those who look to legislation to do more than this, an error which is pushed to the utmost extreme in the reconstruction legislation, consists in regarding legislation as a force or source of energy, and in regarding civil institutions as self-creative and self-perpetuating. Force, however, lies in men. Legislation at best can only define the mode of its action. The more or less of force, and its quality, which the men possess is an objective fact which legislation cannot modify. Civil institutions always cost energy for their production and perpetuation, and the men have to supply it.

(c) Legislation can define the duties of all persons charged with conducting an election, but it never has, and never can, attach any sanctions to the performance of these duties which shall reach anything but gross negligence or fraud. The only dependence is on the competency and good-will of the officers charged with these duties. Here again, then, we find ourselves on the first and lowest formative stage of political life, where the question is this and only this: What are the facts in regard to the intelligence, political sense, and civic virtue of the citizens, and what special qualifications of information, executive ability, and honor can you dispose of for organizing and managing? On this character of the elements you have to deal with will depend the kind of political system under which the society can be organized.

(2) It is quite natural that, with our laws and customs, we should, in case of contested elections, turn to the courts. We have already in some instances profited by the traditional respect of the people for anything which emanates from judicial authority to escape from serious complications which had arisen from contested elections. I regard this resource, however, as one which is full of danger—to the courts. Instead of finding in the courts an institution capable of standing by its own

strength and of sustaining the institution of elections besides, we shall drag the courts down into the mire of party politics. Party zeal, with us, overrides everything else. It is the strongest political and civil force in this country. The judiciary cannot check or control it. The result of a collision between the judiciary and party zeal will be that the traditional reverence for the judiciary will be gradually broken down by rage at party defeat. The judiciary will then no longer be available to correct fraud or error in elections, nor for its own proper business either. The Supreme Court of the United States lost prestige and authority by the Electoral Commission of 1877 to a degree which it cannot recover in fifty years of careful and correct activity within its proper functions, and the worst of it is that we are likely to need, in the future, institutions which can bring the highest possible degree of traditional reverence, sanctity, and dignity to the support of private rights. If we use up the judiciary in political contests, where are we to find such institutions? A recent example has shown us that, a judicial "decision," when it decides the possession of political power between parties, easily degenerates into a stump speech. The Electoral Commission of 1877 showed that if you know the party politics of the judges, you know what the decision will be on a question involving party power. Such is the conviction of the American people of both parties to-day. This is certainly squandering the prestige of the judiciary with great rapidity.

(3) Returning then to the conception of an election as a struggle for power, we see that the law only determines who shall take part in it and by what criteria the victory shall be decided. An election then is a collision of forces, and it must produce a social convulsion. A "fair" election is one in which the greater force predominates in proportion as it is greater. The greater force will, if it is not interfered with, get the most votes into the box by legitimate means. The contestants will bring to their support all that can help them. The fight is one which is usually carried on "with all the advantages." The most that can ever be hoped for or demanded is that the contestants will refrain from what is dishonorable and dishonest. It seems, however, to be believed by a great many people that the voter ought to, and will, reduce himself to an automaton,

impersonal and equal to all the other voting automata, endowed with just enough intelligence to select one of two bits of paper, and just enough physical energy to drop the bit of paper in a box. The voter is expected then, for the purpose of an election, to divest himself of all his means of influence for making his opinion *heavier* than that of other people, altho it is only *one* opinion, such as his education, his wealth, his reputation and acquired character which make his neighbors respect his opinion, the attachment of dependents to him, his ties of friendship and relationship, all of which are means for getting in more than one vote to represent one opinion. The fact is that the notion of counting opinions instead of weighing them is only a makeshift for want of a common measure by which to weigh them, and when this notion is pressed it produces nothing but absurdities. Do not men like Don Cameron and John Kelly get more than one ballot each into the boxes to represent their "opinion" and "will"? Did not Anna Dickinson, during the era of sentimental politics, get into the boxes a great many ballots of the kind she wanted, altho she cast not one? Was the only vote in the box due to Horace Greeley's thinking, believing, and willing, the one he himself put in? Does the leader of a club in a lager-beer saloon have only one vote? Does not every one know the power of money in an election, even when used in a more or less legitimate way? Does not every one know what local, personal, industrial, sectarian, and other motives influence every election? Are we not all trying, in our place and way, to make our opinions tell on other people's convictions and votes? Yet when we generalize, we turn our backs on all these facts and agree to repeat all the old commonplaces and conventionalities. All parties make efforts to make their opinions weigh, and they all find fault with each other's efforts, but the efforts are perfectly legitimate so long as they are not dishonest, and they extend over all the relations of life.

We know that we and our neighbors hereabouts will not throw away our means of influence at the very moment when we want to use them. We should regard any such action as democracy and equality run mad, but we think that it would be very reasonable and proper for Southern rebels to do this and

voluntarily to come down to the political level of newly emancipated freedmen, in order that the great principles of equality and majority rule may have free course and be justified. We have managed to get on in our northern communities with the dogmas of the democratic republic because our population is reasonably mixed and the elements of incompetency are not too large a fraction of the whole, but especially because we have the inherited institutions of civil liberty securely established in our constitutions, and in the habits and knowledge of our people : but the history of the South under reconstruction was a *reductio ad absurdum* of the great dogmas of democratic republicanism. The demands which are now made on the South really amount to asking that civilization shall be voluntarily subjected to barbarism, out of deference to majority rule.

II. (1) The experience of the South with negro suffrage has suggested, and therefore has proved and illustrated, many of the observations which have been made in this and the former paper. The vast number of black men who were admitted to the suffrage—in some cases more than half the adult male population of the State—were incompetent for the function assigned to them, just as it might be said of some of us that we are incompetent to navigate ships, run locomotives, manage banks, or command armies. In any practical art we should say at once that the question of capacity was fundamental as determining what functions a man can undertake; but, so soon as a political question is raised, people begin to think of it as a transcendental question, having no limitations in earthly facts. Yet political activity is a practical art. If then there is a body of men who cannot do what the election theory requires that they shall do, they are just so much material to be duped on the one side or bulldozed on the other. As to the matter of fact, those who know the negro best say that he neither knows nor cares anything about the next Presidential election unless General Grant runs. If Grant does run, the negroes are all for him. This indicates a very narrow political philosophy in the majority of two great States, and certainly throws strong light on the great assumptions of the election institution which we have discussed above.—Forty years ago the roughs of Baltimore, Philadelphia, and New York used to bulldoze the respectable voters and pre-

vent them from voting, because they would rather refrain than risk insult and violence. Why has this evil been put down? Obviously because the aggrieved persons possessed capital, intelligence, and will to protect themselves, and they found means to do so. They introduced police to the great discontent of the roughs, who remonstrated in the name of "liberty." They introduced registration, and subdivided polling districts, and adopted other devices, some direct and some indirect. If the evil elements were still superior, further changes would be made even to the abandonment of elections altogether. New York City, in fact, has long ceased to be a democratic republic. The elected body (Aldermen) have only a shadow of power. The city is governed by executive commissions. The change has been brought about by imperceptible steps as experience has proved it necessary. It has resulted just at present in an incoherent mixture of the most incongruous political theories, united by no consistent plan at all, and so it moves with great friction, is very inefficient, and very expensive. It illustrates, however, this observation, that when we find things do not work well we change them to try to get the results we want, and we let political theories and dogmas take care of themselves. This is on the hypothesis that *we are free and self-governing*. What should we do if our manner of dealing with our own political problems was subject to review and correction by some other and distant communities, say South Carolina and Louisiana? We put tramps in the State Prison in Connecticut. I am not sure that the people of Louisiana would approve of this as consistent with the "rights of man," if they felt called upon to express any opinion about it, yet I do not see why they should not oversee our treatment of white tramps if we oversee their treatment of black ones.

(2) Any election system requires a homogeneous population. In England, where social classes are widely separated, free and independent elections remain a sort of unattainable ideal. On the continent, where there is a bureaucracy widely separated from the non-official world, and able to favor or annoy the citizen, elections have always been manipulated to suit the government of the time. This need of a homogeneous population for the success of elections is greatest under the democratic-repub-

lican system. Hence elections on that system in New England have worked very fairly, and do so yet, except in the largest cities, where the population is most heterogeneous in education, occupation, possessions, and nationality. But when the population includes two races nearly equal in number, an election of the New England type becomes impossible. The question is only which race shall rule the other, and the election gives a chance to try that question. In Hayti the blacks, aided by the climate, drove the whites all away. In our Southern States the struggle is only beginning. The point for our present purpose is that no elections on our Northern type are possible there in the present state of things. There was nothing which could properly be called an "election" in several of the Southern States in 1876. There was only a scramble for political power under a parody of electoral forms. The attempts which had been made, on one side and the other, to construct machinery to win in the scramble only complicated the matter still more, when the attempt was made to deduce the result by the processes which would have been applied if an election had really taken place. Observe the series of acts on either side. (a) The dogmas of democracy had been applied in their most absolute form to this heterogeneous society, which was going through a social revolution; (b) Republican institutions in the South had been used to try to secure party supremacy in the Union for an indefinite period; (c) The people whose interests were sacrificed in this attempt had set to work to defend their interests by cunning, deceit, and covert violence, and, being the stronger, wealthier, and better educated, they had succeeded in a large measure; (d) Some kind of a transaction having taken place on election-day, reports were sent in which were so imperfect and inaccurate that the usual processes could not be applied to them. (e) The question then was, Who has outwitted whom? Whose devices have proved inadequate? By what devices can we yet gain possession of the political power? The disappointment and rage on either side and amongst the allies of either side were proportioned to the hopes and pains which had been engaged in the contest. The burden of either side was, They have stolen the election from us! The truth was that there had been no "election" at all. The election institution had broken

down under the fearful strain of the Reconstruction Acts on the one side and the efforts of the Southern whites to defend themselves on the other; furthermore, the resulting political disease was no longer local; it was infused by means of the Presidential election through the whole Federal system. It broke out next in Maine.

(3) The inference I draw is that the Southern States, upon whom the problem weighs directly, must be left to deal with it without coercion or review by anybody else. The principle of local self-government is the only one which promises to find the true lines of development on which Southern society must advance. The South will serve the whole nation in devising institutions to meet the exigencies of the situation. The South is "solid" now by virtue of external pressure only. So soon as this pressure is withdrawn the South falls apart. It no longer has a definition or a bond of union. What is to unite Delaware, Maryland, and Virginia with Louisiana and Texas rather than with Pennsylvania and Ohio? What is to unite Kentucky and Missouri with South Carolina and Florida rather than with Illinois and Kansas? Nothing but tradition, which cannot stand against all the other growing ties. The negro vote, when the South ceases to be solid, will be not an engine for keeping the rebels down, but a tool of base political intrigue and a menace to the whole country.

The negro is unquestionably entitled to good government, but giving him political rights has made it harder to give him good government. The zeal which is shown by certain persons on behalf of the negro's political rights is due to the fact that when his rights are curtailed the political power of those persons is curtailed. If the Chinese or the Indians could be counted on to vote solidly for one party, no doubt that party would not rest until the Chinese and the Indians had received political rights. There would be no gain to good government, however, for anybody.

III. (1) The need for special information, high character, and executive ability for the organization and management of elections is a need which increases as society becomes more complex. In a primitive community, such as one of the old New England townships, where the citizens were all equal

within very narrow limits, the selection of organizers and managers had very little to go upon. But where, as in our large cities, the population is divided into classes which possess education, wealth, culture, and civic virtue in very different degrees, the selection of those to be charged with the important and, as I have shown, almost irresponsible duties of managing elections should be made with great care and according to very severe standards, if the election institution is to be maintained pure. If the class without responsibility, position, or character is the one from which the persons are chosen for this function, the selected elements of fraud, chicane, intrigue, and bargain will be installed in the most influential positions over the ballot-box and at the canvassers' table. Who can believe that we can admit these elements to these positions and then eliminate their influence from the result by any devices whatever or by any application of judicial procedure? Of all positions and duties in our political system, those of conducting elections and counting votes require most the selection of agents by character, executive ability, and responsibility.

(2) The old doctrine of political science was that the voters must organize, and hold the election themselves. We used to be taught that this was especially essential as opposed to any management of the elections by agents of the "government." According to this theory the election was like a public meeting. The necessary organs for the conduct of the business were evolved from the electoral body for the occasion; they performed the duties, reported the results, and dissolved again into the body of the citizens. They were, therefore, local, informal, and spontaneous, and they exercised their functions under the check and guarantee of publicity. That this is the correct theory is unquestionable, and it ought to be held intact so far as possible. Two things interfere with it: (a) The attempt to select a large number of officers by election, and the consequent intricacy and extended detail of an election; (b) The growth of large cities in which the town meeting and everything resembling it becomes impracticable. This latter case, however, as we saw above (III. 1) is the one in which the selection of the managers of elections becomes most important. We have then here some explanation of the rapid decay of democratic-republican institu-

tions in great cities, and we see the need of devising new expedients to meet the difficulties experienced. It is plain that elections as practised in simple, primitive, agricultural communities are impracticable in complex societies. We may affirm with confidence, however, that any new devices which really sustain the integrity of the election institution will produce the managers of elections by some kind of spontaneous and independent action of the constituency and not by any appointment or delegation from centralized authority.

(3) This brings me to the next point: the election institution cannot be kept pure by appointing inspectors and supervisors to watch over it and keep it so. Who will supervise the supervisors? The notion of supervisors of elections is radically at war with the notion of self government. It belongs only to the theory of party conflict and party supremacy. If the people of Connecticut were not capable of self-government, the people of Massachusetts might come here and govern us; but how could they come here and enable us to govern ourselves? If the people of Connecticut were not capable of governing themselves, they could ask the people of Massachusetts to come and govern them; but they could not ask the people of Massachusetts to come and help them to govern themselves. When the federal government appoints supervisors, the party in power perpetuates its power. For supervisors and inspectors of election either do nothing at all or they influence the election very materially for one side or the other. (a) Where the two parties are composed of persons substantially equal in political capacity, the function of the supervisor is nothing. The parties watch each other and errors and frauds cancel. (b) When the two parties are widely unequal in political capacity, but equal or nearly so in numbers, it is inevitable that other forces than numbers should be brought into the contest, viz. craft, deceit, money, favor, terror, etc., even if violence and falsification of the returns be not employed. In this case, if the supervisor looks idly on, he is simply a witness to the modifications which an "election" undergoes under these circumstances. If he interferes, he gives the election to those who would not have won. Then it is he who confers political power and not the election. To have the appointment of election officers in any large city, or in communities like our

Southern States, is to possess no small advantage for the election contest itself. That is why such an intense struggle arises over the possession of this power, as was seen in the contest of the Police Commissioners for the appointment of inspectors, etc., in New York City before the election of 1879. The demand that the national government shall supervise national elections is simply a demand that the party in power may manipulate elections in those States in which it is in a minority.

(4) It is not possible to secure a pure election by the use of soldiers. There is no true antithesis between "fair" and "free" elections. No election is fair which is not free, and an election which is "free," owing to the protection of troops, is free for the side the troops favor only. The notion of voting under military protection is even more unfortunate than that of legislating under military protection. Even as to police power, the party in power needs nothing more than the power to arrest on a charge of illegal voting to annoy and vex its adversaries to such a degree as to win an election. If this police power is deemed indispensable, it should be exercised only under the strictest responsibility, by persons of the highest claims to public confidence.—A friend of mine described to me an election in San Domingo. Two sentries were stationed at the door of the voting house all day. At evening not a vote had been cast. A corporal's guard was then sent out which captured a dozen citizens and marched them between the sentries. The election was decided unanimously according to the wish of the administration.

IV. (1) I now advance to one of the propositions which it is my chief aim to establish by this and the previous essay, that is that the popular notion of elections is superstitious. It attributes to elections causative force which they do not possess. This false notion of causation is the essence of superstition. The popular notion is that we have a free country because we select our political officers by elections, that our "free institutions" centre in and depend upon elections, that our prosperity is due to the political methods of which elections are the most important, that our "rights" depend upon and are guaranteed by elections, and that the right of voting is the most important civil right we possess; in short, if we speak of good government, justice, liberty, or equality before the law, the mind of the hearer

seems to turn to elections as the core and essence of all these things. Woman suffrage is almost entirely a product of the superstition of elections. The crudest statements of it which I have ever heard have been given in woman-suffrage meetings. Upon analyzing the institution of elections, and examining the operation of this institution in practice, we have found that, if we disregard the halo of sentiment and humbug which has been thrown around elections, elections are only a clumsy and inefficient apparatus for the political purposes they aim to serve, and that they are rather a disgrace to our civilization, so imperfect and inadequate are they. They are not a source of energy and cannot therefore cause anything at all. We get out of an election, at best, something less than went in, of political energy and civic virtue. Elections are not a gift from heaven or from nature, as a source of good government, or a means for getting it. They are a burden or a task. They demand energy, which we have to expend out of the store at our command.

(2) Now the reason for a vigorous and ruthless attack on this superstition is the same as the reason for an attack on any other superstition, viz. it blinds those who hold it to true relations of cause and effect, and prevents them from rightly estimating other institutions. They attribute political good and ill respectively to the wrong institutions. My proposition is that elections are no guarantee of good government. The guarantees of good government are the institutions of civil liberty which have been wrought out by centuries of experience and are now secured by constitutional provisions. Of these institutions, representative institutions are amongst the most important, and elections are properly a part of these. Beyond this, and that is to say in all the special rôle which elections play in a democratic republic, elections are not a guarantee of justice, liberty, security, or equality before the law. The careful definitions of these terms which were given in the introduction are now to be borne in mind. The condemnation of fist-law, slavery, serfage, caste, privilege, and hereditary distribution of political power is that they all violated liberty, *i.e.* they all allowed one man to bend to his own use and benefit the product of another man's energies. Now, where that is still possible liberty is imperfect, even tho' every man, woman, and baby votes, and votes every

day. That it is still the case with us that one man can use another's products is certainly true, so long as we have protective tariffs, unjust tax laws, usury laws, subsidies, and special legislation. I repeat that the reason for trying to destroy the superstition of elections is to try to bring out of its neglect and obscurity the true notion of liberty, civil liberty, that we may perceive what it is, may see when it is violated, may learn to fight for it, and may not allow ourselves to be cajoled out of it by platitudes about voting.

(3) The exaggerated estimate of elections, and the neglect of true conceptions of civil liberty, is one consequence of the sentimental politics of the last twenty-five years. Sentimental politics have weakened the political sense of the whole people. The old fetishism of the constitution has died out without giving way to a true estimation of constitutional liberty. We have had an era during which the capital necessary for the political editor and speech-maker was only a little stock of sentimental and philanthropic commonplaces, and the easy exploitation of military glory. Add to this now some phrases about a free country which have come down to us from the time when the United States really were in advance of other nations in some important elements of civil liberty, and we have all the pabulum which our local political editors and political speech-makers are giving to the people by way of political education. In all this there is no word of reference to the institutions which are the real guarantees of civil liberty, and which have saved civil liberty again and again, not from the executive, for there has never been any danger from him, but from a momentary popular majority, which has assailed liberty very often. I go no further back than President Grant's veto of the Inflation Bill, for an instance in which the popular will pushed Congress on to an act which would have impaired liberty in the most direct manner, for it would have given some men's products to other men's use. The constitutional institution—the veto—arrested this wrong. The Supreme Court is an institution which has been the great bulwark of liberty in our history, and it has incurred popular hostility again and again because it has stemmed the popular will of the moment. In short, it is to the institutions that we are indebted for our liberties, and not

to the dogmas of democracy or the method of government by elections at all. The most that can be said about elections is that we know no other or better method to get government carried on under the circumstances of this country.

I have attempted to show that:

(1) Elections, far from being a simple and efficient means for attaining certain ends, are very imperfect and clumsy, and do not reach those ends in a satisfactory manner.

(2) Elections have no magic for securing good government. Good government can only be won by the energy and civic virtue of the people.

(3) Elections have not, either in history or theory, any authority or preference as means of government. The question is always open whether good government is better attained in this way than in some other.

(4) An election, in a democratic republic, is the mode of a struggle for power.

(5) The character of the results produced by an election will depend on the character of the people amongst whom it is employed, especially on the character of the party which wins: hence bad government might have full legitimacy under the democratic republican system.

(6) The theory of elections, when tested by experience, proves false in four of its most important assumptions: (a) the voters have not their opinions already formed whenever the election-day comes around; (b) they will not deliver their opinions without fear or favor whenever the election-day comes; (c) they will not decide their votes purely in view of the public welfare; (d) the mechanism of the ballot is not a simple and adequate means of expressing the public will.

The reasons for the failure of the theory of elections under the last head are:

(1) The attempt to extend the principle of popular election to the selection of nearly all the agents of civil government, of every kind and grade. This extension (a) makes elections complicated and intricate and applies them where they are not suited to the purpose; and (b) it breaks up the correlation of power and responsibility which is one of the first principles of good government, and leads either to deadlocks, when indepen-

dent officers will not co-operate, or to corrupt combinations, when they form alliances.

(2) The recurrence of elections at fixed periods whether there is any real crisis in the politics of the nation which calls for a solution or not.

(3) The close consolidation of parties which, on the one hand, makes political interest intense and high for those who are in politics, and, on the other hand, makes those who are not in politics feel that they are only the dupes of the politicians, so that from weariness and pride they cease to do political duty.

V. As to remedies, I especially refuse to plan or propose remedies which run counter to the genius of the country, or which will revolutionize old institutions, or which would necessitate the introduction, full-grown, of two or three new ones. A democratic republic we are and must remain for a long time to come. We must take the advantages and disadvantages of this political form together. It will be some gain, however, to note :

(1) That one of the greatest dangers to this form of government comes from the tendency to political dogmatism. The element of democracy is the aggressive element, and it is all the time trying to subjugate the institutions of the constitutional republic. Its weapons are dogmas which flatter popular vanity. If it should succeed, it would establish democratic absolutism—the worst tyranny possible. The remedy is correct knowledge and just estimate of the institutions of civil liberty, and prompt effort in their defence whenever they are assailed, no matter by whom.

(2) That if it is said that "the people ought to rule," and if we mean by the people the mass of the voters as distinguished from the educated, wealthy, etc., then we have all the evils of *class legislation* as much as in an oligarchy or aristocracy. If the democratic mass takes to itself all the rights and gives to the élite all the duties, the evils of *arbitrary power* are perpetuated as much as if there were a privileged aristocracy. One class has given way to another, but the wrong is just the same. Where there is class legislation or arbitrary power there cannot be good government. The true notion of "government by the people" is a political system which unites all the people under

institutions which prevent *any* class from ruling any other class, and which combine all in their parts and shares both of political duties and political rights. The democratic republic tends all the time to fall into the error of falsifying the definition of "the people," and so tends to become a class government in its turn. The remedy here again is sound notions of constitutional liberty and intelligent zeal for it.

(3) That the plan of holding elections at regularly recurring periods presents peculiar dangers. That plan is based on the theory that we must have frequent chances to turn out unsatisfactory officers, but that if all is going well the old officers will be re-elected. This theory has no relation, however, to the actual practice. The democratic-republican system, in this respect, lacks both stability and flexibility, but the usage is firmly established in the system. Public opinion is not even prepared for discussion on this point as yet.

(4) I add one other reflection on the general conditions of the successful working of democratic-republican institutions, and I sum up in it my most earnest convictions with regard to the present and future political welfare of this country. The institutions of a democratic republic require not only high and general intelligence (this has become a commonplace), nor the moral virtue of self-control (every self-governing people, whether it has a republican form of government or not, needs that), but also the sense of justice and the spirit of concession, a willingness to listen to remonstrances, to consider grievances, to discuss opposing opinions, to yield to defeated interests all due consideration. These are the virtues which are most foreign to democracy, yet, when we consider the nature of our Federal Union and the character of our heterogeneous population, the need for these virtues rises to the indispensable.

The "remedies" so far are more political sense and higher civic virtue. Indeed these are the true remedies for political ills, and the only ones which produce permanent improvement. We may, however, specify some positive remedies which are recommended by our study of elections.

(1) The use of elections for the selection of officers ought to be greatly curtailed, and especially it ought to cease in regard to administrative officers. Appointment pure and simple, by an

Executive who would be solely and directly responsible to public opinion for his selections, is far more suitable for the selection of this class of officers. The power of removal should be equally absolute under the same responsibility.

(2) Elections should be less frequent. The evils of bad officers would be much less if the reform just mentioned were carried out, but, in any case, the evil of enduring a few unsatisfactory incumbents for a longer time would be very far less than what we now suffer from continual uproar and continual change.

(3) The Southern States ought to be released from oversight and thrown upon themselves, so that they may settle their social problems in their own way and as speedily as possible. As they are now, they are a source of political disease, and they are corrupting the political system of the whole country.

(4) In working to improve the election system we must aim not at greater elaboration and complication, but at greater simplicity.

(5) It would be an important step if the offices on which the purity of elections depends could be made honorary offices, for which persons of the most established character should be selected. Here the hindrance in the way of a desirable innovation is the lack of conviction in the public mind that any such innovation is needed. In the nature of the case no such reform can be carried out until it is called for by a general and spontaneous public demand.

WILLIAM G. SUMNER.

THE GENESIS OF SIN : A STUDY IN THE THIRD CHAPTER OF GENESIS.

HOW long did the Primal Pair continue innocent, and, therefore, in Eden? We have not been told. Enough that we know that in process of time they fell, and thereby forfeited Paradise. The melancholy tale is told in the Third Chapter of Genesis.

I. THE TWO TREES.

And, first, the Two Trees : "The LORD God planted a garden in Eden, Eastward, and there He put the man whom He had formed ; and the LORD God caused to spring up out of the ground every tree that is pleasant to the sight, and good for food, and the Tree of Life in the midst of the garden, and the Tree of Knowledge of Good and Evil." What now was signified by these two trees? No question can be more thrillingly important : for in this story of Adam's Fall through the eating of the forbidden fruit our own destinies have been mysteriously and inextricably involved. What then was meant by these two trees?

1. *The Tree of Life.*—Take, first, the Tree of Life. What kind of life did the tree represent? Why was it called the Tree of Life?

If I conceive it rightly, it was called the Tree of Life because it was the symbol of a bestowed immortality. Observe precisely the statement here made ; the statement is not that man is not immortal ; the statement is that man is not naturally, inherently, in the original make-up of his being, immortal. Observe again : I am not speaking of the evi-

dences of man's natural immortality as indicated by reason, or instinct, or the general sense of mankind ; I am speaking of the doctrine of immortality as indicated in the story of the Fall. And yet candor compels me to add that not a single passage of Holy Writ from Genesis to Revelation, so far as I am aware, teaches the doctrine of man's natural immortality. On the other hand, Holy Writ emphatically declares that God only hath immortality ; that is to say, God alone is naturally, inherently, in His own essence and being, immortal ; He alone is the eternal I AM—having this as His name forever, His memorial unto all generations. If then man is immortal, it is because immortality has been bestowed on him. He is immortal, not because he was created so, but because he has become so, deriving his deathlessness from Him who alone hath immortality. And of this fact the Tree of Life seems to have been the appointed symbol and pledge. That this is the meaning of the Tree of Life is evident from the closing words of the account of the Fall : “ The LORD God said : Behold, the man hath become as one of Us, to know good and evil : and now, *lest he stretch forth his hand, and take also of the Tree of Life and eat, and live forever*—therefore the LORD God drove the man forth from Eden, and stationed on the east of the garden the cherubim and the flaming sword which turned every way, to keep the way to the Tree of Life.”

But how much did this immortality mean ? How much of man was it intended to include ? The entire man—spirit, and soul, and body. Let us go somewhat into detail.

And, first, the Tree of Life meant immortality for man's spiritual nature. What is it which distinguishes man from animal ? Is it the having a body ? Certainly not ; for animals have bodies. Is it the having a sentient nature ? Certainly not ; for animals have a sentient nature : they too can feel and choose and will, can remember and dream and reason, can feel emotions of love and dislike, joy and grief, fear and shame. What, then, is it which distinguishes man from brute ? Evidently this : man's capacity to be religious—his capacity to see God, and worship Him, and love Him, and be consciously glorified in Him. And this is life indeed. This is that for which man was created. He was made for something more than to

eat and drink—the swine does that ; something more than to wear fine raiment—the butterfly does that ; something more than to build houses—the robin does that ; something more than to provide for the future—the bee does that. Man was made to be divinely inbreathed, to be God's image, to share God's character, feelings, modes, society, blessedness, life ; in brief, to walk with God, even as Enoch walked, and was not, for God took him. And of the everlasting continuance of this Godward capacity the Tree of Life seems to have been the divinely ordained symbol and pledge, or, if you please, " Sacrament."

Again : the Tree of Life meant immortality for man's bodily nature. Indeed, it is the opinion of the theologians generally that this is the chief significance of the Tree of Life. It seems to me, however, that this is reversing the natural, true order ; putting the less for the greater, the consequence for the occasion. Trees do not grow from leaves to root—trees grow from root to leaves. God's true order, at least for man, is from the inward to the outward, from character to drapery. It has often been asked whether man would have died in respect to his body had he never sinned ? If by bodily death you mean death in the penal sense, I answer—No. " Through one man sin entered into the world, and through sin, death ; and so death passed upon all men, for all sinned." But if by bodily death you mean death in the physiological sense, then I answer—Yes. For Adam's body was formed out of dust of the ground ; *i.e.*, of material atoms organized under a vital force, and, as such, must have obeyed the laws of matter as organized ; and laws of organized matter, at least under the present constitution of things, are laws of change—laws of growth and decay, of combination and dissolution. In this sense, our bodies even while living are daily dying. Moreover, life, whether of plant, animal, or man, has what may be called a natural lease, or definite course to run, involving a sort of physiological wax and wane. In this sense bodily death is only chemical dissolution, in no necessary respect a penalty or curse. Indeed, so far from this being the case, it is quite possible that in Eden death may have been simple rejuvenescence, or even an ascending metamorphosis, and so in strictest truth an

euthanasia. We know not what modifications matter in the hands of an infinite God may be made to assume. And it is possible, as many theologians have supposed, that the Tree of Life had the power of imparting physical immortality, or of converting the body as now organized into another and a nobler ; so that death in Eden would have been, not dissolution, but translation ; not penalty, but beatitude. In all events, the Tree of Life was in some way or another the symbol and pledge of a bodily immortality.

This then seems to have been the meaning of the Tree of Life : Immortality for the entire man.

2. *The Tree of Death.*—But there was a second tree—the Tree of the Knowledge of Good and Evil, or, more briefly, the Tree of Death. What now was meant by this Tree ? What kind of death did it signify ? In other words, what is the Scriptural idea of death considered as the consequence of eating of the forbidden tree ?

And, first, alike in order of time and of importance, the Tree of Death meant death of man's spiritual nature, or that part of man which, as we have seen, separates him from the animal, and makes him kin to Deity. It involved many awful particulars, among them such as these : loss of innocence, sense of guilt, of internal schism, of shame, of alienation from God, of God's displeasure, growing insensibility to heavenly truth and motive, inexorable tendency to sin, and, finally, extinction of the religious faculty itself. And this is death indeed ; death spiritual, essential, everlasting. It is the second death.

Again : the Tree of Death meant the death of man's bodily nature. By death of man's bodily nature I do not mean death in the bare physiological sense of the term ; for that, as we have seen, would have occurred had man never fallen ; but I mean the penal hastening of that death and the dread escort of disease and pang. While it is true that, physiologically speaking, man, in virtue of his very structure as an organized being, carries within him the seeds of his own dissolution, I see no reason why, under an unfallen, normal condition of things, his life might not be protracted far beyond the present maximum. If the chronological table given in the Fifth of Genesis is to be

taken literally—*i.e.*, as a genealogy of personages and not a table of dynasties—Adam himself, on whom the curse of death directly fell, lived 930 years ; and during the first seventeen centuries of the race—*i.e.*, between Adam and Noah, following the line of Seth—there were only ten patriarchs, the average duration of their lives being 857 years ; and all this in a fallen, and therefore abnormal world. Now if such great longevity has already been possible in a world more or less disorganized by the intrusion of such an alien and disturbing force as sin, who shall say what might have been the immense longevity of human life had man never fallen and access to the Tree of Life never been barred ? However this may have been, enough that we know that death as a disaster is a consequence on sin ; through one man sin entered into the world, and through sin death ; and thus death doth spread to all men.

We have thus in our study of the Tree of Death, as in our study of the Tree of Life, proceeded from the inward to the outward, from the root to the fruit. To draw a figure from astronomy, bodily death is but penumbral, the region of partial shadow ; spiritual death is the full umbra itself—the region of complete eclipse. It is not bodily death which is the reality, and spiritual death which is the metaphor ; it is spiritual death which is the reality, and bodily death which is the metaphor.

Such seems to have been the meaning of the Tree of Death, even

“ That forbidden Tree, whose mortal taste
Brought death into the world, and all our woe,
With loss of Eden.”

II. THE TEMPTATION.

And so we pass to ponder the story of the Temptation.

And, first, the Tempter himself : “ Now the serpent was more subtle than any beast of the field.” Here is a stupendous problem : sin is in the world ; how shall we account for it ? Philosophy retreats from the problem discomfited. Holy Scripture solves it—at least so far as such a problem is capable of solution to a finite being—by declaring that sin was introduced into the world by an alien, superhuman foe. That foe,

it declares, is capable of assuming all sorts of guises, even of transfiguring himself into an angel of light. Here, in this primal temptation, it represents him as assuming the guise of a serpent ; and this perhaps because of his stealthiness, sinuousness, craftiness, charmingness, deadliness. Remember that the primal pair, according to the narrative in hand, had never known any thing of evil, and were strangers to our sense of antipathy to the snake. This entry of the Prince of Evil into the serpent form is the first recorded instance of demoniacal possession. Who does not instantly recall the story of the demonized swine of Gadara ?

And now we pass to the temptation itself. The serpent said to the woman : “ Is it even so that God hath said : ‘ Ye shall not eat of any tree of the garden ? ’ ” Observe how artful this is. First, he misrepresents the Creator’s prohibition by extending it to all the trees of the garden. “ Hath God said—‘ Ye shall not eat of *any* tree of the garden ? ’ ” Thus he prepares the way to induce Eve to explain, and so enter into conversation. Satan has half won the battle when he has taken “ Ear-gate.” Don’t parley. Secondly, in the very fact of recalling to her that there has been a prohibition he awakes the sense of restraint and restlessness, and so allures to transgression of the limit. Don’t hover too near moral boundaries. The woman’s answer proves that the subtle temptation has taken effect : she said to him : “ Of the fruit of the trees of the garden we may eat ; but of the fruit of the tree which is in the midst of the garden God hath said : ‘ Ye shall not eat of it, and ye shall not touch it, lest ye die.’ ” You perceive that she has already fallen. For, first, she depreciates her privileges ; in quoting the Creator’s broad permission—“ Of every tree of the garden thou *mayst* freely eat”—she omits the word “ *every* ” and the word “ *freely* ”, and substitutes the cold expression—“ Of the fruit of the trees of the garden we may eat.” Beware of belittling the Heavenly Father’s goodness. Secondly, she exaggerates her restraints. In forbidding the Tree of the Knowledge of Good and Evil, God had simply said : “ Thou shalt not eat of it.” To this prohibition of eating she adds the prohibition of touching : “ Ye shall not touch it.” Beware of over-religiousness or pharisaic addition of

extra-scriptural command. Thirdly, she softens the divine threat in case of disobedience ; for the stern words—" In the day that thou eatest thereof thou shalt surely die," she substitutes the gentler phrase—" lest ye die." Beware of trifling with the government of God, or diluting the severity of His menaces. And now the Tempter advances from insinuation to asseveration. The serpent said to the woman : " Ye shall not surely die ; for God knoweth that in the day ye eat thereof your eyes will be opened, and ye will be as God, knowing good and evil." First : he gives the lie direct : " Ye shall not surely die." Whether the doctrine of universal salvation be true or not, one thing is certain, the Devil was the first preacher of it. Secondly : he makes a very magnificent promise : " God knoweth that in the day ye eat thereof your eyes will be opened, and ye will be as God, knowing good and evil." Thus he adroitly appeals to one of the noblest instincts of the race—the thirst of knowledge. Again : he seeks to awaken the sense of independence of God, tempting Eve to substitute egotism for loyalty. It is the very essence of the sin of the young man in the parable of the Lost Son. It is in an eminent sense the characteristic temptation of these modern times. Satan still tempts us to become as wise as God. He still tempts us to renew the Jewish outlawry during the period of the Judges : " In those days there was no king in Israel ; every man did what was right in his own eyes." He still tempts us to say with the King of Babylon : " I will ascend into heaven—I will exalt my throne above the stars of God—I will make myself like the Most High." Self-worship is that awful and final form of blasphemy which the Apostle Paul describes when he speaks of the Man of Sin—that son of perdition who opposeth and exalteth himself above every one that is called God, or is worthy of worship : so that he sitteth in the temple of God, giving out that he himself is God. Let us take care then lest, being puffed up with pride, we also fall into the condemnation of the Devil.

III. THE FALL.

And now we pass to the tragic issue. " And the woman saw that the Tree was good for food, and that it was pleasant to

the eyes, and a Tree to be desired to make one wise ; and she took of its fruit, and ate, and gave also to her husband with her, and he ate." Observe : The temptation was three-fold ; good for food, pleasant to the eyes, desired to make one wise. As such it recalls the threefold temptation of the second Adam—the Wilderness, the Pinnacle, the Mountain ; and also the threefold lust of the Apostle John : the lust of the flesh, the lust of the eyes, and the pride of life. " And the eyes of both of them were opened, and they knew that they were naked : and they sewed fig leaves together, and made themselves aprons." Ah, the awful irony of Satan's promise ! Their eyes were indeed opened, but it was to see guilt instead of innocence, folly instead of wisdom, shame instead of trust. And now the cooling breeze of an oriental afternoon has come. It is the hour of sacred contemplation, the blessed hour in which the Son and Word of God—Jehovah's true voice—had been wont to visit them in love and blissful communion. " And they heard the voice of the LORD God walking in the garden at the cool of the day." Had they been penitent, had they in that awful hour confessed their sin and besought forgiveness, who knows but that humanity would have had an altogether different history and all earth been to-day one blessed Eden ? But " the man and his wife hid themselves from the presence of the LORD God amongst the trees of the garden." It was the cowardice of conscious guilt. Already has the penalty threatened against disobedience begun to take effect. Already has the fallen pair begun to die. See how shame has fallen like a mantle of filth on these hitherto untarnished, blithesome spirits. See how security has given way to restlessness, trust to dread, fellowship with God to aversion from Him. Behold them a guilty, remorseful, shame-faced, cowering pair, trying to hide themselves amongst the trees of the garden. And this is death indeed—a genuine, intense, perfect death. Verily, on the very day Adam fell, Adam died. It was scarcely necessary he should be expelled Eden ; the instant he tasted of the forbidden fruit, Eden became for his spirit a charnel-house. And as with him, so with us :

" Conscience doth make cowards of us all."

" And the LORD God called the man, and said to him : ' Where

art thou?" " It was not the voice of wrath, but the voice of love ; not the Judge's summons, but the Good Shepherd's call, piping back the lost sheep. And Adam said : " I heard Thy voice in the garden and was afraid, because I was naked, and hid myself." It was a hollow, sophistical answer. Naked he had been from the beginning, but never before had he been ashamed or afraid. But now in his fall and self-delusion he substitutes effect for cause, shame for guilt. It was the birth of conscience as an accuser. But the Heavenly Father would still bring His erring son to penitence and confession, and so He saith to him : " Who told thee that thou art naked ? Hast thou eaten of the Tree of which I commanded thee not to eat ?" Instead of frankly confessing, he makes selfish, mean, impious defence : " The woman whom Thou gavest to be with me, she gave me of the Tree, and I ate." Thus he ignobly blames the wife who had been supernaturally bestowed upon him, and in the same breath he impiously blames the Divine bestower Himself. And now the LORD God turns to the poor woman herself : " What is this that thou hast done ?" And again the blame is transferred, but more frankly than in the man's case. The woman said : " The serpent beguiled me, and I ate." Thus has the Heavenly Father's visitation at the cool of the day become a Divine Avenger's inquisition. Such is the story of the victorious Temptation.

IV. THE SENTENCE.

And now let us turn to the Sentence. It was threefold.

1. *The Tempter's Sentence.*—And, first, the Tempter's Sentence : " The LORD God said to the serpent : ' Because thou hast done this, cursed art thou above all cattle, and above every beast of the field ; on thy belly shalt thou go, and dust shalt thou eat all the days of thy life ; and I will put enmity between thee and the woman, and between thy seed and her seed : He shall bruise thee on the head, and thou shalt bruise him on the heel.' " The sentence involves three dooms.

First : a doom of degradation : " Cursed art thou above all cattle, and above every beast of the field ; on thy belly shalt thou go, and dust shalt thou eat all the days of thy life." And

here comes into view one of the many hints that the story of the Fall is to be taken as a Divine parable. As a matter of fact, prone locomotion is and always must have been the serpent's natural gait ; it was so, if geology is true, ages before man's advent upon earth ; for the serpent to walk erect is and always must have been an anatomic impossibility—that is, so long as he is a serpent. Again : dust is not, except in a very limited sense, the serpent's food. Once more : we do interpret the "bruising," the "head," the "heel," figuratively : and if a part of the serpent's sentence is confessedly figurative, why may not the whole of it? It is a Divine parable, written for our admonition, upon whom the ends of the world are come. As the serpent itself was not Satan, but only the symbol of him, so the prone gait, the dust-food, the bruised head, are symbols of Satan's character, habits, and doom. We know but little of Satan's antecedent history. All we know touching this is that he kept not his first estate. In his original character and condition he was doubtless superhumanly glorious. But because he had entrapped the primal pair into a fall, the LORD God pronounced on him a doom of degradation : "Cursed art thou above every beast of the field—on thy belly shalt thou go—dust shalt thou eat." Beware of Milton's magnificent Satan : for it is not the Satan of Scripture. As we feel the snake to be—mean, odious, loathsome—so is the real Satan, the Satan of man's fall. How graphically Horace Bushnell portrays him :

" The serpent makes no appearance till we ascend to the tertiary formation, and then it wriggles out into being contemporaneously with the more stately and perfect order of mammalia. When the mammoth stalks abroad as the gigantic lord of the new creation, the serpent creeps out with him, on his belly, with his bag of poison hid under the roots of his feeble teeth, spinning out three or four hundred lengths of vertebrae, and having his four rudimental legs blanketed under his skin : a mean, abortive creature, whom the angry motherhood of nature would not go on to finish, but shook from her lap before the legs were done, muttering ominously, ' Cursed art thou above all cattle : upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life.' "—*Nature and the Supernatural*, p. 208.

And again John Ruskin :

" That rivulet of smooth silver : how does it flow ? It literally rows on

the earth, with every scale for an oar. Watch it when it moves slowly ! A wave, but without wind ! A current, but with no fall ! All the body moving at the same instant, yet some of it to one side, some to another, or some forward, and the rest of the coil backward : but all with the same calm will and equal way : one soundless, ceaseless march of sequent rings and spectral procession of spotted dust, with dissolution in its fangs, dislocation in its coils. Startle it : the winding stream will become a poisoned arrow : the wave of poisoned life will lash through the grass like a cast lance. It scarcely breathes with its one lung (the other shrivelled and abortive) : it is passive to the sun and shade, and is cold or hot like a stone ; yet it can outclimb the monkey, outswim the fish, outleap the zebra, outwrestle the athlete, and crush the tiger. It is a divine hieroglyph of the demoniac power of earth."—*Queen of the Air*, pp. 83, 84.

Secondly : it was a doom of hatred : "I will put enmity between thee and the woman, and between thy seed and her seed." "I will put enmity between thee and the woman." Already he had hated her : henceforth she would hate him. May we not hope from this that even Eve was saved ? "And between thy seed and her seed." "Thy seed"—*i.e.*, all the wicked ; for he that committeth sin is of the Devil ; for the Devil sinneth from the beginning. "And her seed"—*i.e.*, all the righteous—even that church which consists of Christ the Head, and Christians His body ; for, as head and body are one, so are Christ and His church ; Christ the Centre, His church the circumference, the fullness of Him who filleth all in all. The enmity between the serpent and his seed on the one hand, and the woman and her seed on the other, was true, first, in the case of Him who was in the eminent sense the seed of the woman—even Jesus Christ. And the enmity was mutual. On the one hand, Satan hated Jesus all the way between Manger and Sepulchre ; and, on the other hand, Jesus hated Satan all the way from heaven to heaven again. Again : the mutual enmity is true of the Church, which is Christ's Body. How relentless and ceaseless Satan's temptations, persecutions, ambushes, sieges, assaults ! The very meaning of the word Satan is adversary. He showed me Joshua the high-priest standing before the angel of the Lord, and Satan at his right hand to oppose—Satan—him. And the Church reciprocates the enmity. She is in very truth a church militant, on a war footing, wrestling, not against flesh and blood, but

against principalities, powers, world-rulers of darkness, spiritual hosts of wickedness in heavenly places. Once more: the enmity is true of each saint, every Christian being a member of Christ's own Body. For Satan is a personal foe, hating the Church in detail, member by member. And each Christian reciprocates the hate. In proportion as he walks in light, he is a conscious fighter against the Powers of Darkness. And so the doom of enmity is ever being fulfilled. The intense antipathy we feel to the snake, our involuntary recoil from him, our instinctive impulse to crush him: all this is a parable and type of the Church's antipathy to the great Dragon, that old serpent called the Devil and Satan.

Thirdly: it was a doom of defeat: "He shall bruise thee on the head, and thou shalt bruise Him on the heel."¹ How true this was of Jesus Christ, the Church's Head! For this very purpose was He manifested that He might destroy the works of the Devil. Listen to the disciple whom He loved, as, in his Patmos banishment, he beheld in prophetic trance the coming victory: "Now is come the salvation and the might and the kingdom of our God, and the authority of His Christ, because He hath fought with the great Dragon, and cast him down.". Again: this victory over Satan is true also of the Church, which is Christ's Body: for the body shares the fortunes of the head. Listen to a sublime saying of the Church's Lord: "I saw Satan fall from heaven like lightning: lo, I have given you authority to tread on serpents and scorpions, and nothing by any means shall hurt you." And so the church militant, even while on earth, is gliding into the church triumphant, overcoming Satan through the blood of the Lamb. Once more: this bruising of Satan's head is true of each Christian, each saint being a member of Christ's body. Take courage, then, O panting, staggering, soiled one! Thou shalt yet tread on the lion and the adder: the young lion and the dragon shalt thou trample under foot. "And thou shalt bruise Him on the heel." For Satan's warfare is cowardly, biting the heel instead of smiting the brow. But his wound, thank God, cannot be mortal. Thus he bruised

¹ The Vulgate, misconceiving the Hebrew pronoun, turns it into a feminine. Accordingly, Roman Catholic interpreters declare the Virgin Mother to be the conqueror of Satan.

the heel of Christ, who is the Church's Head. Behold the wounds of the Wilderness, the Pinnacle, the Mountain, the Garden, the Cross, the Tomb. But after all it was only Messiah's heel that he bruised. And in the very act of having His heel bitten Jesus crushed the serpent's head. Through His own death He destroyed him who had the power over death—that is, the Devil. The cross was alike Satan's gibbet and Jesus' sceptre. Again : the serpent's bruising of the heel is true of the Church, which is Christ's Body. Behold the wounds of persecution, affliction, temptation, toppling. But after all it is only her heel that he bites. No permanent disaster has ever befallen or ever will befall the true Church. As vital and immortal as her Head, she

“ Cannot but by annihilating die.”

Once more : Satan's bruising of the heel is true of every saint—all being members in Christ's Body. If they persecute the Head, they will also persecute His members : for the servant is not greater than his lord. Yet it is only the heel that Satan bites. Perplexed, yet not in despair ; persecuted, yet not forsaken ; struck down, yet not destroyed ; dying, and, behold, we live !

Such is the Tempter's sentence ; the threefold doom of degradation, aversion, defeat. God grant that His Church may bruise Satan under her feet shortly !

2. *The Woman's Sentence.*—And now we pass to the Woman's Sentence : To the woman He said : “ I will greatly multiply thy sorrow and thy conception : in sorrow shalt thou bring forth children, and thy desire shall be to thy husband, and he shall rule over thee.”

And, first, her sentence as mother : “ I will greatly multiply the pains of thy pregnancy : in pain shalt thou bring forth children.” Oh, the birth-sorrows of humanity ! How many a Rachel in giving birth to her child calls him Benoni—son of my anguish—and dies ! And spiritual birth-woes there are as well as bodily. When Zion travaileth, she bringeth forth children. Here too is a type of the great vicarious sacrifice. Jesus Christ—the true seed of the woman—in the very act of bringing forth the children whom God had given Him surren-

dered His own life. For aught I know this is the reason why, as an apostle tells us, woman shall be saved through her child-bearing ; her very pangs are prophetic of untold blessing. Well then may woman's sorrow be reverenced ! I do not wonder that millions are worshipping, as millions have worshipped for centuries, the Nazarene Mother. But, after all, that is the truest birth-hour when the Son of God Himself is born within us.

But the woman was not only sentenced as mother : she was also sentenced as wife : " Unto thy husband shall be thy desire, and he shall rule over thee." True, woman from the instant of her creation had been subordinate to man. As the man is the image and the glory of God, so the woman is the glory of the man ; for the man is not from the woman, but the woman from the man : and the man was not created for the woman, but the woman for the man : for Adam was first formed, then Eve. Subordination to man then is woman's normal state. But the Fall intensified and debased the subordination, for it was not Adam who was first deceived, but Eve. Henceforth allegiance sank into thraldom. Unto thy husband shall be thy desire, and he shall rule over thee. What a commentary on these words has been the history of woman from the beginning !

3. *The Man's Sentence*.—And now we turn to the Man's Sentence : to the man He said : " Because thou didst hearken to the voice of thy wife, and didst eat of the Tree of which I commanded thee saying—Thou shalt not eat of it : cursed is the ground for thy sake : in sorrow shalt thou eat of it all the days of thy life : thorns and thistles shall it bring forth to thee : and thou shalt eat the herb of the field ; in the sweat of thy face shalt thou eat bread, till thou return to the ground : for out of it wast thou taken : for dust thou art, and unto dust shalt thou return." The sentence involves four dooms.

And, first, a doom of nature : " Cursed is the ground for thy sake : thorns and thistles shall it cause to spring up to thee." Observe : while the Tempter has been cursed directly—" cursed art thou above all cattle"—his victim is cursed obliquely—" cursed is the ground for thy sake." But I hear an objection : " Is not this cursing the soil for man's sake unjust ?" Remember then that man, in virtue of his body-side, is linked and even kinned with nature. At the same time, in

virtue of his spirit-side, man is superior to nature, standing forth as its epitome, representative, genius, head. Hence Adam's fall was nature's fall. Earth's true Samson, when man fell, nature's pillars fell with him.

“Earth felt the wound, and Nature from her seat,
Sighing through all her works, gave signs of woe,
That all was lost !”

But I hear another objection : “If geology be true, disorder, monstrosity, pain, death were in the world before sin or man.” To this I think it may be answered : This story of the Fall is a divine parable, to be taken spiritually, setting forth in way of colossal hint and shadow the emergence of evil on the stage of time. One thing is certain, nature to-day is visibly under a curse. Thorns and thistles are characteristically the soil's natural produce. This, in fact, is the meaning, to large extent, of agriculture itself. What is the larger part of tilling the soil but the uprooting of thorn and weed ? And this curse of the thorn is a typical curse, representing volcanoes and earthquakes, simoons and deserts, miasms and plagues, deformities and abortions, diseases and death. The bar sinister is on nature's heraldry. Verily, creation has been made subject to vanity—*i.e.*, to disappointment, abortion, as though she had been made in vain, unable to realize her own inherent gifts and ends. In a word, nature has been de-natured.

Hence, secondly, a doom of toil : “In the sweat of thy face shalt thou eat bread.” Not but that man from the very beginning was meant for work. Labor was man's normal condition, having been installed in Eden to keep and till it even while still unfallen. But there is a difference between work and toil, between normal activity and penal service, between Eden as a gymnasium and earth as a work-house. I do not undertake to explain the philosophy of the primal curse. All I know is that if, while man was yet in Paradise and the ground uncursed, it was necessary for him to work, that necessity was vastly heightened when he was driven from Paradise, and the thorn and thistle choked the vine and fig. Labor—what is it but the price of life ? In Eden man was to work that he might conquer nature : now man has to toil that nature may not conquer him. Ah, the ceaseless toil of hand, as in the farm.

the mine, the factory ! The ceaseless toil of brain, as in the study, the office, the laboratory ! The ceaseless toil of heart, as in society, the household, the sick-chamber !

Hence, thirdly, a doom of grief : “ In sorrow shalt thou eat bread all the days of thy life.” How true this was in Adam’s own case : a lost Eden, a murdered Abel, a fugitive Cain ! How touching the many plaints of sacred litany ! The plaint of a Lamech on the birth of his son Noah, of a Jacob before Pharaoh, of a Job beneath the bruises of Satan, of a David fleeing before Saul, of a Solomon in his old age, of a Paul impaled with the thorn ! And so it is with all earnest, deep, keen-sighted men. Whatever the philosophers say, these deep natures know that earth has been cursed. The unwritten tragedies of shop and farm, of forum and pulpit, of mart and home ! The tones of nature herself, we are told, are in the minor key : as such they are ever echoing the primal curse. Here is the secret of earth’s woes. Had sin never entered the world, the world had never known such words as disappointment, anxiety, disgust, terror, shame, heartache, despair, suicide. We have mourning-weeds for those whose bodies we have laid in the ground ; what weeds shall we wear for dead affections ? How mighty, how funereal the procession that follows in thy train, O sin ! Verily, the world is administered, not from the Gerizim of blessing, but from the Ebal of cursing. But there is another woe, even sadder.

Fourthly, a doom of death : “ Till thou return to the ground : for out of it wast thou taken : for dust thou art, and unto dust shalt thou return.” Dust thou art. How it recalls the story of man’s creation ! “ The LORD God formed the man of dust of the ground.” How it forebodes the psalmist’s dirge : “ Thou turnest man to dust, and sayest, Return, ye sons of men !” How pathetic the echo of this curse of death in our own great poem of *Thanatopsis*.

V. THE EXPULSION.

And now we come to the last scene in the great drama of the Fall : “ And the LORD God said : ‘ Behold, the man has become as one of Us, to know good and evil ; and now, lest he stretch forth his hand, and take also of the Tree of Life, and

eat, and live forever : ' therefore the LORD God sent him forth from the garden of Eden, to till the ground from whence he was taken ; and He drove out the man, and He stationed on the east of the garden of Eden the Cherubim, and the flaming sword, which turned every way to keep the way to the Tree of Life.'"

And, first, the sorrowful acquisition : " The LORD God said : ' Behold, the man has become as one of Us (probably the imperial plural—*Pluralis Excellentiae*), to know good and evil.' " I cannot think, as some scholars have imagined, that the Creator uses here the language of irony. No, the saying is profoundly true. Not that God knows evil in the same way that we know it. He knows it from without—by observation : we know it from within, by experience. Here we see the reason why the forbidden tree was called the Tree of the Knowledge of Good and Evil. Satan tempted the primal pair to decide for themselves, independently of their Creator's will and teaching, what is right and what is wrong : that is to say, he tempted them to lay down for themselves the foundations and standards of morality, and thus become as God, knowing good and evil. There are some things which had better remain forever unknown. And Satan succeeded in his temptation : " Behold, the man has become as one of us, to know good and evil." That is to say : " Man has become law and God to himself." Verily it was a most sorrowful acquisition.

Thank God, we are told of a merciful denial : " And now, lest he stretch forth his hand, and take also of the Tree of Life, and eat, and live forever, therefore the LORD God sent him forth from the garden of Eden, to till the ground from whence he was taken : and He drove out the man." The Tree of Life was, as we have seen, the symbolic sign and pledge of immortality. And so the exclusion from the Tree was a genuine mercy. For immortality in a state of sin—and to continue in a state of sin is to be evermore growing more and more sinful—what is it but the hell of hell ?

" And He stationed before the Garden of Eden the Cherubim." It is the first occurrence of this mysterious word. Yet, figuring as it does throughout Holy Scripture, at Eden, in Moses' tabernacle, in Solomon's temple, in visions of Isaiah and

Ezekiel and John, it is a most mysterious word. But whatever their nature or structure, they seem to have been symbols of creation ; and as such answering to the four living creatures of the Apocalypse. Here at Eden they were stationed to barricade the avenue to the Tree of Life. Nor was this all. A flaming sword there also was, brandishing every way—east, west, north, south—to ward off every possible approach to the same life-continuing Tree. Thus the Garden of Eden, once committed to man, to be kept by him, has been taken from him, henceforth to be kept against him. Yes, nature herself is a retributive economy ; so that he who sins sets nature against himself. Man has fallen, and all creation stands guard at the Tree of Life.

Such is the story of Man's Temptation, Fall, and Doom, or, more briefly, the Genesis of Sin.

Glancing back in way of review, let us briefly note some of the lessons of the story.

VALUE OF MORAL PROBATION.

First : The value of moral probation. For it is evident that the Forbidden Tree was intended to serve among other purposes the purpose of a moral test. And we may bless God that there was and still is such a Tree. For no one knows or can know himself till he has been tested. Ordeal is necessary to the proof of character—aye, to character itself. What tho Adam, when installed in Eden, was fresh from his Maker's hand and radiant with His image ? He needed a forbidden tree in order that he might not only awake to the sense of right and wrong, and so of morality, but also that he might awake to the sense of his power of choice between right and wrong, obedience and disobedience. And so the forbidden tree tested him, alas, too well. Nevertheless the test was intended to be, and but for his own fault would have been, a genuine kindness. For the sense of obedience, not less than the obedience itself, is essential to moral joy. Thus a specific prohibition gave to Adam the opportunity of knowing whether he was obedient or not. Had he obeyed the prohibition, that very sense of obedience would have been to him the source of a genuine bliss. Nor was Adam the only man who has had this test of a forbidden tree. All human life—oh, that we more thoroughly understood

and believed it!—is a probation, a probing, a testing. In our own moral constitution itself—in the very make-up of our moral structure—each of us necessarily has in himself a Forbidden Tree. In fact, Eden itself would not be an Eden unless it had such a Tree. God grant that we may endure the test better than did our first father!

JESUS CHRIST THE TRUE TREE OF LIFE.

Secondly, Jesus Christ is Himself the true Tree of Life. Listen to one of the legends of medieval Christendom. When Adam lay at the point of death he sent his son Seth to the gates of Paradise that he might gain access to the Tree of Life, and bring some of the oil of mercy which flowed from its twigs, to anoint him for his burial. That oil Seth was not allowed to have. But the cherub who guarded the gates of Eden gave him a slip from the sacred Tree, and with this he returned and planted it on his father's grave at Golgotha. There it took root and grew and became a tree. From that tree came the wood of the wand which Moses so often miraculously wielded, also the rod which budded in token of Jehovah's sanction of the priesthood of Aaron, also the pole on which the brazen serpent was uplifted, and, finally, the Cross of Cavalry itself. It is but a legend. Thank God, it conveys a profound truth. That truth is this: Jesus Christ—Son of God and Son of Man, Seed of the Woman—He is the true Tree of Life. Our Saviour Jesus Christ, by His appearing, hath abolished death, and brought life and immortality to light through the Gospel. This, in fact, is the Gospel, the Evangel, the glad tidings of great joy unto all people. Out of Christ, death—in Christ, life: this is the teaching of Him who alone hath immortality. He who touches His cross, and only he, lives forever. To draw a figure from arithmetic: Jesus Christ is Himself the separatrix between powers and zeros. Our destiny depends on our position with reference to Him, whether we are on His right hand or on His left, whether we are for Him or against Him. And the way to the true Tree of Life is now open. No sleepless cherubim, no gleaming scimitar stand guard before it: “The gates of Paradise open stand on Calvary.” Whoso eateth His flesh and drinketh His blood hath everlasting life: for His flesh

is the true food and His blood the true drink. It is the nectar and ambrosia of the true immortality. Philosophers of the Middle Ages spent many a long and weary year in quest of what they called the *Elixir Vitæ*, or life-prolonging tincture of gold. O ye weary, plodding ones, dying ones, yet panting for immortal youth, ye shall not find it where alchemists searched for it in alembic and crucible, nor where ye are looking for it in the chase after wealth, or power, or pleasure, or fame. Jesus the Nazarene, the man of Joseph's tomb and Olivet's cloud—He only is the true *Elixir Vitæ*. In Him alone is immortal youth, immortal beauty, immortal life.

SUPERIORITY OF THE SECOND ADAM'S EDEN.

Lastly, the lost Eden is to be regained, and more than regained. The day is coming when the curse shall be uplifted, and there shall be neither serpent nor thorn, neither death nor tear. Aye, that is the true Golden Age for which the great poets are ever sighing : not the Eden that has been, but the Eden that is to be. For the paradise future shall be as much nobler than the paradise past as the second Adam is nobler than the first. This is the meaning of the majestic paragraph, Romans 5 : 12-21, paradoxically blending parallel and contrast, and which may be summed up in the last part of the twentieth verse, "Where sin abounded, grace did much more abound." The new Eden is the old Eden intensified and transfigured—*e.g.*, instead of a garden there is a city ; instead of a single pair a multitude whom no man can number ; instead of a Euphrates or Tigris of natural water, the River of the Water of Life ; instead of the occasional visitation of the LORD God in the cool of the day, the permanent tabernacling of God with men ; instead of the coats of skin the fine linen, pure and shining, of the righteousness of the saints ; instead of vengeful cherubim and averting sword, the rapturous welcome of the Living Creatures, representatives of creation. Heaven grant that as all of us have died in the first Adam, all of us may be made alive in the Second ! Washing our robes in the blood of the Lamb, we shall have right to the Tree of Life, and enter through the gates into the City.

GEORGE DANA BOARDMAN.

THE EDENIC PERIOD OF MAN.

IN these closing years of the nineteenth century the Protology of man has become a subject of profound interest in its relation to recent discoveries. That man has been upon the earth during at least two geological periods preceding the one in which we are now living, is a well-established fact. Further, there is a strong presumption that the race commenced its career at the end of the third geological period preceding our own as a contemporary of the highest order of air-breathing mammals. It is not our purpose to offer a demonstration of the above propositions. They are as worthy of acceptance as was the Copernican system in its time as opposed to the ancient belief in the Ptolemaic theory of vortices. Whoever will take the trouble to consult the revised edition of Dana's Geology may see the photograph of a man who lived in the south of France, on the shores of the Mediterranean, in the Quaternary era, that is in the geologic period next preceding our own. C. F. Keary, of the British Museum, has just issued a publication called "The Dawn of History," in which man is treated historically from this standpoint. The full scientific reasons for such a position taken also by the College of France are given by M. de Quatrefages in his lectures entitled "The Human Species."

The life of man upon the earth then, we may assume, extends as far back as the close of the third geological period next preceding our own. In view of the inevitable general acceptance of these positions, in the near future, by all educated men, the question becomes of imminent importance, How are these facts related to the cosmogony of Genesis? While we shall not undertake to solve one by one all the intricacies of this problem, only to be worked out in the lapse of time by further discoveries

in science and history, we propose to open the way to its solution, and indicate suggestively the line on which investigation must proceed.

The first eleven chapters of the book we call Genesis, "*the Book of Beginning*," give in brief outline a history of man from the Edenic period to the time of the migration of Abraham from the valley of the Euphrates to the shores of the Mediterranean, and constitute an introduction to the religious history of a special branch of the Semitic family. This general introductory history of man is composed of a number of separate fragments or statements arranged in consecutive order, without chronology, and embodies a selection from the traditions and records of the ages preceding Abraham of what was considered in his family to be historic concerning the cosmogony of the universe and the protology of man. We may presume that these records, carefully selected and carefully preserved, were brought by Abraham from the valley of the Euphrates into the land of Palestine and constituted his family Bible—the beginning of the sacred books of the Hebrews. In order to comprehend the standpoint of this family Bible of Abraham we must carry ourselves back to the period of his migration into the land of Palestine. This period we may state, in general, to have been in the twentieth century before the Christian era, and the standpoint we must take is not upon the shores of the Mediterranean, but in the valley of the Euphrates, and in the land of Chaldea, and in Ur of the Chaldees, the great commercial city of that valley and the London of the period. Within the past ten years a flood of light has been thrown upon the surroundings of Abram in this same city. It was a city wholly given to idolatry. On every hand were colossal emblems of that vast nature religion which, in different forms, had spread over the whole earth, and which held in its grasp the two great civilizations of the Euphrates and the Nile. He lived in the very focus of its culmination, and in the golden age of its literature. The four Nimrod cities of Babel, Erech, Accad, and Calneh formed a quadrilateral of which Babel, or Babylon, was the religious centre. We may suppose that the family of Abram were the last to preserve, against such overwhelming odds, the traditions and observances of a pure monotheistic worship, and we may presume that Abram himself was the last of his family

to preserve such traditions and observances, for we find that the father of Abram, *Terah*, "served other gods."

Abram in Chaldea was an adherent of the ancient monotheistic *El* religion. The term *El* or *Al*, "strength," "power," applied to the Supreme Being implies infinite power and might. The primary conception of this term is that of power and might centred in a person. The *El Shaddai* of Abram's worship was this personal power exercising dominion and lordship, the almighty Creator and Ruler of the universe. Power and dominion centred in one Supreme Being as the object of worship was then the religion of Abram in Ur of the Chaldees.

CHALDEAN COSMOGONY AND THEOGONY.

Before we can comprehend the historic position and character of the family religious documents which Abram brought with him into Palestine, we must understand something of the nature of the old Chaldean Cosmogony and Theogony, under pressure of which these documents had taken shape. The cosmogony of the Chaldeans was essentially a nature development, and included an evolution of the gods as well as men, from a primary protoplasm through the coworking of the two original principles of heat and moisture, one looked upon as passive and the other as active, the passive principle being conceived as feminine and the active as masculine. Behind this nature development stood *El*, in Chaldean teaching, too remote for practical purposes. His place was therefore taken by the first theogonic product of the original protoplastic forces, which deity was worshipped under the name of *Bel*, "the Supreme Lord." To *Bel* were assigned all the attributes of the original, monotheistic, personal *El*, in addition to those especially belonging to him as a nature deity. He was known in Chaldean teaching as the *old Bel*—the Ancient of Days—dwelling in light unapproachable—without beginning or end—the active principle which gave life to matter and existed before the creation of the world—the Father of Gods and men, whom he evolved out of himself. Associated with the old *Bel*, as the product of *all* the cosmogonic potencies deified under various names—was his first-born and only son—*Bel the Demiurge*, the organizer of the world—the perfect manifester and ex-

press image of the Father Bel, to whom was committed the lordship of the universe. The old Bel appears to be, in Chaldean doctrine, a cosmogonic potency representing the principle of heat and life and light, and the younger Bel a *personal expression*, or "Logos," of the old Bel.

This Chaldean Bel cosmogony was a travesty of the ancient *El* religion, in which Yao, Yav, or Yahveh, whose name in Chaldean doctrine means "the living one," or "manifester of life," and includes the idea of continuous life forever manifesting itself in the past, the present, and the future, was the *El* Demiurge, the express image and Logos of *El*—to whom was committed the creation of the world and the lordship of the universe. The travesty was complete when the Bel Demiurge was invested with the name Yao, and was known as Bel-Yao. By this usurpation of the name Yao by the Bel Demiurge, that name became degraded into the associations of the Bel religion, and in the time of Abram held an inferior place in the nature Pantheon as a manifestation of Bel as god of the visible heavens or lower atmosphere, which place he still held in the time of Nebuchadnezzar, as appears in the following, from the great cuneiform inscription of that Chaldean monarch found at Babylon, and which now forms part of the India House collection:

"To the god Yav, establisher of fertility
in my land, Bit-Numkan as his temple
in Babylon I built.
To the god Yav who confers
the fertilizing rain upon my land,
his house (also) in Borsippa I strongly built."

We can understand from this position of the name Yav in the nature Pantheon, why the use of that name as the Logos of *El* had been dropped by the monotheists of the period of Abram, and why it was unknown to Abram himself in that relation till when he was ninety-and-nine years old, and in the land of Palestine Jehovah or Yahveh appeared unto him and said, "I am *El-Shaddai*, walk before me and be thou perfect."

From this point of view light is thrown upon the Elohist and Yahvist accounts of the origin of the world and of man. These accounts belong to the family history of the house of Abram,

clearly reflecting the standpoint of Chaldea and the Euphrates, and having no Egyptian coloring or connections whatever. They represented to Abram and his family all the historic data which had been handed down from the remotest times in the line of Seth concerning the struggles of the Elohists or "Sons of God," and the later Yahvists against the religion of the Old Bel and his Demiurge. These Elohists and Yahvists were, it appears, from the earliest times a very small minority, and preserved the records of their religion under a strong adverse pressure. This adversative element forms a natural key to the explanation of the drapery of these records, which include the two accounts, Elohist and Yahvist, of the creation of the world and the origin of man, and the two accounts, Elohist and Yahvist, of the Noetic Deluge, together with the succession of the Sethite line of Yahveh Elohists, with incidental or fragmentary statements of their points of contact or of conflict with the adherents of the Bel religion among the descendants of Cain.

In these Elohist and Yahvist narratives, the brief notices which are thrown in regarding the Cainite families, showing them as pioneers in the advanced arts of music and metallurgy, as characterized by violence and sensuality, and as making use interchangeably of El and Bel in their family names, indicate them as progenitors of that high material civilization which early took possession of the valley of the Euphrates, and was from the first essentially Baalistic. In connection with the account given of the Sethite line of the "Sons of God" or Elohists, mention is made of a special time in the days of Enos when El or Elohim began to be invoked by them as Jehovah or Yahveh.

In the light of these preliminary observations we will consider a few points in the Elohist cosmogony which opens the Book of Beginning handed down in the line of Seth through Noah to Abram.

THE ELOHIST COSMOGONY OF GENESIS.

We first note that "In the Beginning God (Elohim) created the heavens and the earth," and we face at once the question, Why this use of the plural form *Elohim*, instead of *El*, appa-

rently the oldest and universal Semitic name for the first and highest Deity? This use of the plural form *Elohim* as the name of God is peculiar to the Eberite branch of the Semitic family. The Elohim of the Eberites appears to have been *one* absolutely supreme and personal Being—Creator of the world and Father of spiritual life, embracing within himself all power and might and possibilities of personal manifestation, and yet absolutely *one*, personal in all his acts of creation, and one in all his works. The old doctrine of El and his one personal manifestation or Logos Yav or Yahveh, found in early Chaldean teaching, must have been at first the prominent feature of the religion of the Eberites when they dwelt beyond the river. Their El and his manifestations or theophanies would be to them *Elohim*—in adversative contrast to Bel and his manifestations, or Bel and the *Baalim*. The Baalim were innumerable separate personifications of nature forces, all looked upon as emanations from, or sides of, the cosmogonic potency Bel and his Logos, Bel the Demiurge. The investing of the Bel Demiurge with the name and attributes of El would bring a pressure upon the Elohists to drop the use of the term El for their Supreme Deity, and to substitute for it the all-embracing term Elohim.

The statement that in the beginning Elohim *created* the heavens and the earth is directly adversative to the doctrine of the evolution of the heavens and the earth through the Bel cosmogonic potencies. This Elohim work of creation is represented as proceeding in successive stages or periods called *days*. Now a cosmic day with the Chaldeans was a great cycle of 43,200 years. Lenormant says of the Chaldeans, "They were the first to divide the day into twenty-four hours, the hour into sixty minutes, and the minutes into sixty seconds. Their great periods of time were calculated on this scale. The great cycle of 43,200 years, regarded by them as the period of the precession of the equinoxes, was considered as one day in the life of the universe." In the cosmogony of the Chaldeans these cosmic days and years were used representatively for *great periods*. All the time divisions of the Eberites were the same as those in use by the Chaldeans. It is critically impossible, therefore, to maintain that the *days* of the Elohist cosmogony of Genesis are any other than *cosmic days* used in this representative man-

ner. The relation of these cosmic time periods to the discoveries of modern geology are plainly seen.

In the Elohist cosmogony the six successive periods of creation part themselves in two grand divisions, viz.: life under cosmic light, and life under the light of the sun. Professor Dana has shown this order of development to be in remarkable accord with geological science. Under cosmic light the earth is depicted as clothing itself with vegetation which answers fully to that of the coal plants of the carboniferous era, as we shall show hereafter, and life under planetary light, or the swarming of the waters with living creatures among which are specified "the great Taninim" or "dragons," belonging to the class of which the crocodile of Egypt is an example. These serpent monsters of the deep or "Taninim," unfortunately in our English version translated "whales," answer perfectly to the *reptilia* of the Saurian era, and portray in the proper order the characteristics of that period.

In regard to the first of the human race, it is stated that they were herbivorous as well as the mammals accompanying them. This Elohist cosmogony represented to the Eberites the oldest form of cosmogonic thought and tradition in relation to the creation of the universe and of man. The time which it indicates for the first appearance of man upon the earth is in the sixth cosmic period, in its second division, viz.: *after* the *reptilia* of the deep or the Saurian period, and in company with the highest class of air-breathing, herbivorous animals. After the creation of man and before his first sin there intervened a sabbatical day or period of cosmic rest, during which man is represented to be in familiar companionship with Elohim and Elohim pronounces all things good. Two cosmic days, therefore, or periods of indefinite length are indicated in this cosmogony as that portion of the Edenic period of man in which he existed before his first sin, blessed and perfect in the companionship of Elohim, and under the injunction, "Be fruitful and multiply and replenish the earth and subdue it."

THE EDEN NARRATIVE.

The Eden narrative contained in the Yahvist addenda or supplement to the Elohist cosmogony begins at Gen. ii. 4, and

continues to the end of the third chapter. It opens with a summary of the preceding Elohist cosmogony as follows: "These are the generations of the heavens and the earth in the day when they were created, in the day that Jehovah Elohim made the earth and the heavens." Here is a *day* spoken of which includes seven cosmic days, showing the use of the term *day* for indefinite periods of time. The form of the addenda containing the Eden narrative originated undoubtedly at a later period than that of the cosmogony which precedes it. It probably took shape before the era of Abraham, and embodies a tradition regarded by the Eberites as dating back to as high an antiquity as that of the Elohist cosmogony. With the personal history of man or Adam "the earth born" begins that of the Jehovah or Yahveh theophanies which constitute the background of the religion of the Hebrews, and upon which rests the Christian scheme. The combination, therefore, of the terms Yahveh and Elohim by the Yahvist writer in the statement that Yahveh Elohim made the earth and the heavens, is a point of the most significant interest.

The Eden narrative opens with a statement that Adam, or the man, was made out of the dust of the Adamah, or Adam country. That is, that he came into existence in a defined locality called the Adamah, and also Eden, "the pleasant land." Eastward in this pleasant land of Eden was located the "garden" or specially enclosed and protected spot where Adam, or man, was placed to begin his career. It is described that at this time the entire Adamah country or pleasant land of Eden was covered with vegetation which had been specially prepared for man, among which fruit-trees were prominent; thus: "Out of the Adamah made Jehovah Elohim to grow every tree that is pleasant to the sight and good for food." Following this statement it is added—*parenthetically*—"the tree of life also in the midst of the garden, and the tree of knowing good and evil." This parenthetical, symbolical statement here thrown in we shall consider later in connection with the serpent, to which line of symbolism it is related.

After this parenthesis, the description of Eden, or the pleasant land in which the garden was situated, is resumed, and it is stated (following the English version) that "a river (or water)

went out of Eden to water the garden, and from thence it was parted and became into four heads." The words translated "from thence" mean either "from that place," or from that time, or "afterward," and the root significance of the term rendered "parted" is not that of a quiet parting, but "a breaking in pieces," and *separating by violence*. We would read this passage, therefore, as follows: "And a river (or water) went out of Eden to water the garden, and afterward it was broken up and became into four head streams." It is evident that the Eden narrator had a perfectly clear and defined idea of the general location of this Eden land he was describing, and he intended that no doubt should remain on that point. He was on the Euphrates, which he calls "this Euphrates." The garden of the Eden land, which with the Eden river had been broken up in a preceding cosmic period, was in his view located to the east and north of his own standpoint on the Euphrates, which river was one of the four head streams diverging from that former centre of convulsion. He describes these rivers geographically, commencing with the most distant, or the one farthest to the east. The four rivers were the Pison, the Gihon, the Hiddekel, and the Euphrates. Two of these rivers, the Hiddekel, or Tigris, and the Euphrates, need no comment. The Gihon is described in the narrative as surrounding the whole land of Ethiopia—that is, *the Asiatic Cush*. The mountain chain of that most ancient Ethiopia is called to this day the Hindoo Koosh, which mountain chain is followed by the upper courses of the Indus, that river thus encompassing the whole land of Cush. The neighboring head waters of the Oxus which traverse a region where there are vast stores of rubies and lapis lazuli, and of which the tributary which drains the Samarcand valley bears to this day the name "Zer-Affshan,"—"gold-bringing,"—may well be taken as exactly fulfilling the description of the Pison, "which compasseth the whole land of Havilah where there is gold," and where is bdellium and the onyx stone. It will be noted that the four rivers thus described did not surround the Eden garden. In fact, they did not exist at all in the Edenic period, but were used by the narrator as indices to a tract or region of country the Edenic features of which had been broken up and obliterated by a violent convul-

sion in a former age. It was as if he said, "These four historic well-known rivers, upon one of which I stand, spring from the ruins of our former Eden."

After his description of the breaking up of the Eden river, the narrator resumes the history of the man in the Eden garden, which he was to dress and keep—*i.e.*, "shepherdize"—so that no evil thing could enter it to harm either the garden or man himself, and in this connection it was commanded him, "Of every tree of the garden thou mayest freely eat, but of the tree of knowing good and evil thou shalt not eat of it, for in the day that thou eatest thereof thou shalt surely die." We have stated that the two trees in the midst of the garden were symbolical, but the symbolism was such as to describe at the time of its use the exact historic ideas intended to be understood, and which it was fitted to convey. The symbol of the tree of life bears the same relation to Jehovah or Yahveh in Eden as in the Christ teaching the symbol of the vine and the branches bore to himself, and as the tree whose leaves are for the healing of the nations in the second Eden. It symbolized a perfect life-giving and life-manifesting Deity, who was supremely and *only good*. In the Elohist cosmogony goodness was manifest in all his works, and he pronounced them good. The tree of life, then, in the midst of the garden represented the religion of Jehovah, the true wisdom, and a perfect standard of goodness. The symbol of the living tree had been adopted into the Bel religion and used to represent their mixed good and evil deities. It was characteristic of every one of the deities of that nature Pantheon that each had a good and beneficent, and each an evil and destructive, or Typhonic side—not destructive of evil, but malignantly destructive of good. They were both good deities and evil deities at the same time, a character deduced from the phases of the nature forces which they represented. That knowing good and evil which comes from trying and testing it for one's self—or experimental knowledge—was what was forbidden in connection with the tree which stood as adversative to the tree of Jehovah in the midst of the garden. The reasons for this explanation of the tree of the knowledge of good and evil will appear more plainly further on, in connection with the serpent who was its especial guardian.

The account of the naming of the animals by Adam we consider as adversative to the Chaldean use of deified animal symbols. The animals were better representatives of nature forces than man, and in this respect were superior to man in the Chaldean system, the nature deities of which combined the human form with animal symbols, and were worshipped according to the character expressed by these symbols. The Elohist and Yahvist writers both make an especial point that man was placed above and over the animals, and that man himself was the true image of the Creator and made in his likeness.

Adversative also is the account of the creation of woman from a rib of the man. This is intended to directly traverse the Chaldean doctrine that the woman was before the man. All the nature deities of the Bel cosmogony were double-sided, male and female, but the female principle was first in order of existence, giving birth to all things, gods and men. The very imagery of the Bel theogony is used in the Eden narrative to convey an adversative idea—viz., that man was created first and then woman. In the Chaldean cosmogony Bel the Demiurge cuts the protoplastic woman or “mother of life” in twain, of one half of whom he made the heavens, and of the other half the earth, and thus the world was organized.

THE EDEN SERPENT.

In the Eden narrative the Serpent appears on the scene as the tempter of woman and the adversary of Elohim. In the Chaldean system the especial symbol of the nature Deity, Bel, was a serpent, and he was called the Serpent of Bel. As the Bel Serpent he was both Cosmos and Logos. As Cosmos he represented the heavens and the earth, on the perfected evolution of the universe through nature's laws, of which he was the express symbol, and through which he maintained and upheld the order and harmony of the Cosmos evolved from himself. His female side was called Doto (*Law*), and represented the beauty and harmony of the nature system through the perfect working of its laws. He was called in Chaldean teaching “the old serpent” because he was as old as the order of the universe. As Logos, the Serpent Bel was the teacher of nature's wisdom

to man, of which wisdom he was the sole expounder and exponent. To him was attributed the authorship of the sacred books of the Chaldeans, and as the inventor of letters and writing he was the especial benefactor and teacher of man.

We have, then, in the Eden narrative, represented by the Serpent, the nature wisdom of the Chaldean system, of which wisdom the Bel Serpent was the recognized interpreter. Here is a statement in the symbolism of the period that the beauty of nature and harmony of her laws, desirable to make one wise, induced, through processes of their own reasoning, the apostasy of the first of the human race from the Jehovah religion to the nature wisdom represented by the Bel Serpent, and this is the sin which the Eden narrator describes. Lenormant, in the *Contemporary Review* for September, 1879, brings together and compares the Oriental traditions on the subject of the first sin. Among the Aryan or Iranian interpretations of this primary tradition is the following:

“ Man was: the father of the world was. Heaven was destined to be his on condition of his being humble in heart and doing with humility the work of the law; of his being pure in thought, pure in word, pure in deed, and of his never invoking the Dævas (evil spirits). Under these conditions man and woman were reciprocally to make each other's happiness. They drew near and became man and wife. At first they spoke these words: ‘It is Ahuramazda who has given the water, the earth, the trees, the beasts, and the stars, the moon and the sun, and all the blessings which spring from a pure root and a pure fruit.’ Later, falsehood ran through their thoughts, perverted their disposition, and said to them, ‘It is Angromainyus (the Serpent) who has given the water, earth, trees, and all above-named things.’”

This account of the first sin from Aryan or Iranian sources is in a line of tradition entirely independent of that of the Eberites, but interprets perfectly the Eden narrative. In all the oldest religions of the world, with the single exception of the Semitic Elohim religion, the serpent symbolism held a prominent place as representing a mysterious self-renewing power in nature, having both a beneficent and an evil side. This symbolism is founded upon an ancient belief that the serpent never dies, but forever renews its own life. He thus became in the nature religions a symbol of eternity and immortality, and of

the invisible animating principle by which nature perpetually renews its own life out of death in the circle of the seasons, and so came to represent the ordered harmony of the universe as well as the destructive or Typhonic principle of the same. Being distinguished for the subtle celerity of his movements, which, since he had no visible means of locomotion, were attributed to the exercise of a direct spiritual force, he was held to be wise above all other animals, and as a nature deity represented the secret wisdom of her laws.

In the circumstances, on the Euphrates, as the Eden narrator announces himself to be, no other interpretation is possible than that he was depicting the Bel Serpent of the period in adversative relation to Jehovah or Yahveh, and the apostasy of man from the Yahveh Elohim religion to that of the false Logos, Bel-Yao, the Serpent. In the Eden narrative the names Yahveh and Elohim first appear united, identifying the Yahveh Demiurge or Logos with the Elohim religion, and separating it from that of Bel-Yao and his serpent symbol. Yao was the *secret name* given by the Chaldean priests in their esoteric interpretations of the Bel Logos. They taught secretly that the name was Yao, and was too holy to be pronounced. It became, therefore, a fetish in the nature religion. On their return from the captivity the Jews brought back from Babylon this superstition in regard to the name Jehovah or Yahveh, and from that time the name became a fetish to them also.

In the Eden narrative two consequences followed this apostasy of the first of the race from Yahveh to the nature religion of the Bel Serpent: 1st. The promise that Yahveh would bring back the race to himself and utterly destroy the Serpent. 2d. The first of the race were driven away from their starting-point in the garden spot of the pleasant land, or Eden, and were separated from the tree of life, or the personal companionship of Yahveh. Previous to this change from the first Edenic condition, it is implied in the narrative that man was set above, or outside of, the circle of death to which the animals were subject, but with his apostasy to the religion of the forces of nature he became himself subject to those forces and to death.

The intensely adversative feeling of the Eden narrator appears in his description of the argument used by the serpent to

the woman: "Ye shall not surely die, for Elohim doth know that you shall be as Elohim himself, knowing good and evil"—that is, knowing by experimental knowledge good and evil. As Bel had usurped the attributes of El, the wholly good, combining them with his own malignant or Typhonic nature side, he now asserts to the woman that Elohim himself has an evil side, and is therefore a mixed character of good and evil, and that to be like him the race must take on the same experience. The narrator represents this insult to Elohim as taken up by Yahveh Elohim when, in sending the man forth from the garden, he says, quoting the words of the Serpent with adversative, resentful irony, "Lo indeed! The man is become like one of us! knowing good and evil! and now that he shall not put forth his hand and take also of the tree of life and eat and live forever, therefore Jehovah Elohim sent him forth from the Garden of Eden to till the ground (the Adamah) from whence he was taken."

In immediate association with this driving from the Garden, the Eden narrator relates that eastward of the Garden Jehovah Elohim caused to dwell a light, or Shechinah, to "guard the way of the tree of life." This Shechinah with its Cherubim we will comment upon hereafter in another connection. This Eden Shechinah includes the idea of a continued Jehovah manifestation guarding with a light like the flashing of a sword the way of the tree of life. To the Eden narrator the Cherubim were the especial guardians of the tree of life adversatively to the Serpent as guardian of the tree of knowing good and evil. It is implied by the narrator that the Cherubim light manifestation was regarded as a Yahveh Elohim Shechinah by the Sethite or sacred line in the Adamah or Eden country during the entire pre-Noetic period. It will be noted that the race at first were driven from the Garden, but not from Eden or the Adamah, or Adam country. The Edenic period does not close, therefore, with the driving from the Garden. The apostasy to the nature religion flowered out immediately in the descendants of Cain. This brings us to the *Cainite dispersion*, or migration eastward from the Adamah, or Eden country, which Adamah, with its Shechinah, remained as the religious centre of the Sethite line until it was broken up and obliterated by the waters of the Noetic Deluge.

THE CAINITE DISPERSION.

In the Yahvist and Elohist narratives (for there are several of them) the Cainite dispersion covers a vast territory and an almost inconceivable extent of time. In these records the Sethite line are "sons of Elohim," in distinction from the Cainite branch, who were "the children of Adam," Adam being the representative apostate to the Bel religion, which system of nature worship was further developed and carried on in the line of Cain, his eldest son, and which with its attendant material civilizations is represented as finally overspreading the whole inhabited earth, leaving at the Sethite religious centre in the Adamah only a single family who adhered to the early religion of Yahveh. The advanced character of this Cainite civilization is briefly indicated by allusions to its supremacy in music and metallurgy and the arts of material life. Its moral character is illustrated by the murderer Cain, and by those mighty men of renown, not *giants* as they are called in the English version, but *Nephilim*, men with fierce and fallen (or sullen) countenances, like that of Cain. These men filled not only the Adamah, but the whole earth, with violence.

That the period covered by the eastward migration of the descendants of Cain, and by the development of violence in the Adamah or Eden country, was of great and indefinite length is expressed by the narrator in the phrase "at the end of days," equivalent to "at the end of periods" or "after the lapse of ages," or "eons," periods of indefinite length, the act of violence occurred which cut off the sacred line in the person of Abel, "the son," from the face of the earth. In this great allowance of time by the narrator, we are given to understand that the Cainite or first branch of the human race had increased extensively in numbers, civilization, and violence, and had populated a region to the east of the Adamah before that event took place. It will be noted that the whole narrative proceeds upon the assumption of the very great and indefinite length of individual lives, for it implies that the first of the human race had lived in the Adamah through these great periods of time. After the death of Abel the religion of Yahveh Elohim appears to

have been on the decline till the days of Seth and Enos, when Yahveh began to be invoked as the Special Deity of the sacred line.

THE SETHITE GENEALOGY.

The idea of a genealogy with the Semitic writers was not so much that of a succession of persons or of individual lives, as a *period of time*, to be filled out with a record of the more prominent events of that period and the persons connected with them. Great leaps, therefore, often occur from the record of some historic character to his successor, who is called his *son*, even if a very remote descendant in point of time. This mode of forming a genealogy has perhaps its most striking illustration in the opening of the Gospel of Matthew, beginning, "The book of the generation of Jesus Christ, the son of David, the son of Abraham," and the closing of the genealogy with the statement that the generations from Abraham to Christ are three times fourteen or forty-two generations, whereas Luke gives fifty-six generations as covering this period. This involves no discrepancy from the point of view of the two narrators. The three double sevens of Matthew are used as *indefinite* numbers—not intended to be taken as literal, but simply as *representative* of a *complete* time—of the idea that the full period had arrived for the appearance of the son of David the son of Abraham, *seven* being a sacred number, and multiples of seven the highest expression of completeness of God's time that could be used in connection with the advent of the Messiah.

The use by the Semitic writers of certain numbers as *seven*, *ten*, etc., and their multiples, as representative of complete but *indefinite* time, is too well known to need comment here. In the filling out of the history of the Edenic era, in the cosmic time between Adam and Noah, not only are very long periods attributed to special human lives by the narrator, and required for the consistency of his narrative, but in the genealogical table of the succession of the Sethite sacred line the lives of *ten* historic characters are taken as a representative measure of this period, expressing the idea in *rhythm* (for it is a chant with a refrain) that no break occurred in the succession of the sacred line from Adam to Noah, and also that this same sacred line

were mortals and not immortals, for as descendants of Adam it is said in the refrain in connection with each one after summing up his days, "and he died." This filling out of an indefinite period by ten generations is analogous to, and sufficiently illustrated by the filling out by Matthew of the period between Abraham and Christ by forty-two generations. The post-Noetic Sethite succession in the line of Shem, filling out the period from Noah to Abraham with ten lives of decreasing periods in the length of life assigned to each, is formed upon the principle of the pre-Noetic succession of ten, to convey the same idea of indefinite time, but of a complete succession of the sacred line.

This use of definite numbers as representative of indefinite time is an oriental mode of presenting historic events which does not in the least interfere with the truthfulness of the record for the purposes held in view by the writer. It is very difficult for western minds to adapt themselves to the point of view of such methods of computation, but illustrations are innumerable in oriental literature. The Christian religion has come to us from the East as founded upon a series of historic facts, and we must seek the facts through an understanding of their surroundings, and the methods employed to convey them. In the time when they took shape their form was adapted to be understood by all who heard them. It is only the lapse of ages and our own ignorance which has obscured them.

The inhabitants of Mesopotamia, or the Tigr-Euphrates basin, were from the very earliest period a mixed population, representing every branch of the human family of the Noetic dispersion, who together developed and used a common time notation called the Chaldean system. The Chaldean time divisions, as well as their mode of using numbers symbolically, or as representative of ideas rather than exact time measures, must have been in use by the Eberite branch of the Semites of that region long before the time of Abram. It has been customary to speak of the enormous length assigned in the sacred Chaldean records, not alone to the period of the gods, but to the development of the human race and of their own early civilization, as mythical. Late discoveries and researches show that the history of the development of the material civilization of the Euphrates valley goes back to a far earlier period than has ever

before been held possible. The era of Abram in Ur of the Chaldees was at the beginning of its latest development.

It is a curious fact that in the Chaldean records the period corresponding to the pre-Noetic era is filled out with *ten* kings, whose united reigns cover a cycle of ten cosmic days, or 432,000 years. These ten cosmic days were used by the Chaldeans after the oriental mode, as representative of a great time cycle, not of definite but of indefinite length, which was thus conceived by them in placing it as an introduction to their historic annals. These great and indefinite time periods appear in the early histories of all the most ancient civilizations, and are paralleled by the records of the Eberite branch of the Semitic family, a proper interpretation being given to them in their historic connections and surroundings.

We consider, therefore, that in these Eberite records not only is no limitation intended to be expressed of the Edenic or pre-Noetic period, but on the contrary that the use of the representative number *ten* as the number of generations of that period is designed to convey an idea of *indefinite* time, and that in the era of Abraham it could not have been interpreted in any other way. In this view, therefore, these early Semitic records of the house of Eber take their place by the side of the early histories of all the most ancient peoples of the earth, and both explain them and are explained by them.

We have then some data of comparison of the cosmic periods of the Book of Beginning, with the time measures of modern geology, especially with those related to the life of man upon the earth.

THE PRE-TERTIARY MAN OF GENESIS.

We have stated at the beginning of this article that it is now a well-established fact that man has been upon the earth during at least two geological periods preceding the one in which we are now living; and further, that there is a strong presumption that the race commenced its career at the end of the third geological period preceding our own, or at the close of the pre-Tertiary. Let us consider in the light of geological science the condition of the earth at that period as adapted to

the Edenic man, using Dana's Geology as authority upon the subject, and for accuracy of statement often its words.

At the close of the carboniferous era, or coal period, the atmosphere became so far purified as to admit of the appearance of animal life of the order of the reptilia of the seas, with which the waters swarmed during the Saurian period, or the era of "the Taninim." The closing era of the Reptilian age was the Cretaceous or Chalk period. In the Cretaceous period, which closed the pre-Tertiary, the atmosphere, previously incapable of sustaining the high-class, warm-blooded animals, became sufficiently purified to admit of their appearance. The waters had been so far cooled as to gradually exterminate the sea-reptiles of the Saurian period, and among the fishes of the new era the ancient type of Ganoids gave place to salmon, perch, and herring, and the way was being prepared for what may be called the paradise of the highest class of air-breathing land-animals, or herbivora. With the opening of the Cretaceous period we find a great change in vegetation. Then appeared the first yet known of the great modern group of Angiosperms, the class which includes the oak, maple, willow, and the ordinary fruit trees of temperate regions. More than one hundred species have been collected, and half of them were allied to trees of our own forests—the Sassafras, Tulip-tree, Sycamore, Hickory, Willow, Oak, Poplar, Maple, Beech, and Fig. There were species of Redwood (*sequoia*), the genus to which the "big trees" of California belong. There were also the first of the *Palms*. Fossil palm-leaves of the genus *Sabal* are met with on Vancouver's Island in deposits which have been pronounced Cretaceous. Palms and Angiosperms include nearly all the fruit-trees of the world, and constitute far the larger part of modern forests.

Among the plants which covered the earth under cosmic light on the third day of the Elohist cosmogony, mention is made of "the tree of fruit," which was for seed simply, distinguished from "the fruit-tree," adapted to man's needs, spoken of on the sixth day in connection with the final development of vegetation on the earth's surface under planetary light. The distinction made in the description of these two classes of vegetation is one of the most remarkable features of

the Genesis cosmogony. That of the third day corresponds perfectly to the remains in the coal measures, which indicate as belonging to that period only herbaceous plants, or a fern-like vegetation of exuberant growth, and trees of the order of Gymnosperms, including Conifers and Cycads. Conifers were abundant, and were the modern feature in the Paleozoic forests. Remains of nut-like fruit are common in the coal measures. There were no Palms and Angiosperms.

On the third day, then, we have vegetation of the earth under cosmic light.

On the fourth day the introduction of planetary light.

On the fifth day the Saurians and the birds.

On the sixth day *man* in connection with the land animals, domestic and wild, and the fishes and vegetation of the modern type, or present era.

The first appearance of the land animals, or herbivora, is closely connected with the great change in vegetation from ancient to modern types, and the first appearance of modern fishes, which changes took place in the Cretaceous period, or at the close of the pre-Tertiary. Just at this point, then, we place the man of the Genesis cosmogony, as coming in with the *fruit-trees*, or Angiosperms of the modern era, which are stated to have been planted for his use.

In both the Elohist cosmogony and the Yahvist Eden narrative man is introduced as contemporary with the fruit-trees adapted to his needs. It is only necessary to examine these accounts critically to be convinced that this is not only a fact, but that it was designed to be made prominent, as an indication of the time of man's first appearance upon the earth. We say, therefore, that the geologists have in their discoveries not yet met the requirements of the Genesis protology in respect to the antiquity of man.

Man first appeared upon the earth, then, at the close of the pre-Tertiary. At that period, while the continental areas were clearly outlined and in the process of taking on their final shape, Europe was an archipelago; the great mountain ranges of the three continents, the Rocky Mountains, the Pyrenees, the Alps, and the Himalayas, were partly under water or only in their incipient stages of elevation, while Central and Northern Asia

began to present those conditions which were favorable to the commencement of human life in company with the highest class of mammals or land animals. The greater land masses of the continents were nearly united around a central sea, which we now call the Arctic Ocean, which was the Mediterranean of the period. Warm seas prevailed as far to the north as parallel 60° , and the climate from the head waters of the Oxus to the Arctic Circle ranged from sub-torrid to warm-temperate. That section of land which lay between the Caspian and Hindoo Koosh on the one side, and the northern coast of Siberia on the other, formed the largest continental mass in the most favored position for the development of high-class animal life at the close of the pre-Tertiary.

We assign, therefore, the *Garden* period of man's existence to the close of the pre-Tertiary, some of the general features of which we have presented, but of which the special conditions may have been far more advanced at the point where the *Eden* narrator locates that favored spot. We have an indication of the duration of the *Garden* period in the climatic conditions under which man is described as there existing during a period of indefinite length, before the close of which those conditions were essentially changed. A period of cold came on which necessitated the wearing of fur clothing. It is a curious circumstance how perfectly this agrees with the climatic changes which introduced the Tertiary as laid down by the modern geologists.

At the close of the Cretaceous period there was a general destruction of the *reptilia* of the seas, probably connected with changes of level which took place at the time over the higher latitudes of America, Europe, and Asia, bringing on an era of unusual cold, and sending cold currents southward. It is probable that the destruction was due to the more or less emergence of the continents, especially their northern portions, and to the changes of climate and oceanic temperature thus occasioned.

The *Garden* period then closed with the coming on of the cold of the Tertiary, during which era, however, the climate and all other conditions were favorable for the distribution of man over the entire globe. The emergence of the northern portions of the three continents round the Central or Arctic Sea brought them together around an Arctic Circle of small diameter, and

under a nearly common forest vegetation, with a comparatively moderate climate. In the beginning of the Tertiary England was a land of Palms, with species of Fig, Cinnamon, etc., showing that the vegetation was much like that of India and Australia. The Tyrol also exhibits similar features. Of this period the Miocene of Greenland has afforded one hundred and sixty-two species of plants, very few of which now live in the region. The number of Arctic species now known is one hundred and ninety-four. They include many kinds of trees, none of which now exist in Greenland or within ten degrees of it. Among them the Yew, the Redwood of California, and several other species of this genus; also several species of Japan genera, besides Oaks, Poplars, and Walnuts. There was also a Magnolia and a Zamia. Spitzbergen has yielded ninety-five species, among which are Hazel, Poplar, Alder, Beech, Plane-tree, and Lime. As Lyell observes, "Such a vigorous growth of trees within twelve degrees of the pole, where now a dwarf willow and a few herbaceous plants form the only vegetation, and where the ground is covered with perpetual snow and ice, is truly remarkable."

The late discoveries of Professor Nordenskiold bring to our view the remains of the Tertiary period in the Arctic regions. In a letter from him published in the *London Standard* recently, attention is called to a group of islands which are very remarkable from a scientific point of view, regarding which he says: "These islands, the New Siberian, open the book of the history of the world at a new place. The ground there is strewn with wonderful fossils. Whole hills are covered with the bones of the mammoth, rhinoceros, horses, uri, bison, oxen, sheep, etc. The sea washes up ivory upon its shores. In this group is possibly to be found the solution of the question of the ancestry of the Indian elephant, and important facts with regard to the vertebrates which existed at the time of man's first appearance upon earth."

We have said that the close of the pre-Tertiary or the Garden period was an era of *advancing cold*. It will be noted that in the Eden narrative the driving from the Garden took place gradually. Jehovah Elohim first sends man forth, then clothes him in fur, then drives him out, excluding him forever from a

return to his primitive home. The Garden spot was left behind, and man went forth to till the ground whence he was taken, and to which he must now return. The drapery of cursing, with which the Eden narrator clothes his account of the blight which fell upon the material conditions by which the man was surrounded, and upon the physical well-being of both man and woman caused by the change in climate, is another proof, if more were needed, of his Euphrates standpoint, and of the adversative character of his narrative to the religion of the Bel Serpent, the lapse into which by the first of the race, as he viewed it, had caused this blight upon the earth.

In the Chaldean system *cursing* formed a large part of the nature religion. The infinite number of double-sided good and evil, male and female, deities held a man's life and health and prosperity entirely at their mercy, and all the greater woes, or smaller troubles and pains, were the *curses* that fell upon him from the evil side of some of these nature deities to the propitiation of one or another of whom, whose displeasure, according to his own imagination, was the cause of the particular evil, his whole life was devoted. The formulæ of cursing held the position of a nature science, and when a man was to be especially cursed, the whole Pantheon was summoned each to do his or her part, so that the entire man would be cursed thoroughly and anatomically, in every part of his body, in all his goings out and comings in, and in every relation in life which concerned his welfare. In the view of the Eden narrator, then, these nature deities and all they were supposed to especially superintend were, by the use of their own forms of cursing, put into subjection to Yahveh Elohim as the Supreme Lord of nature as well as of man.

In immediate connection with the driving from the Garden it is stated that far to the east Jehovah "caused to dwell the wings of light, and between them gleams of fire like the flashes of a sword." The word *Cherubim* here used means in its original significance "wings," and in this primary use of the term the wings are described as part of the light manifestation of the flashing fire between them. This first Cherubim Shechinah must have been the pattern and symbol of the later cherubim of the Holy of Holies of the Tabernacle and the Temple, in

which wings, and a light between them, are all that can be defined. This wonderful light in the far east, appearing for the first time with the *coming on of the cold*, is described by the narrator as a Jehovah Shechinah, or a light caused to dwell there by Jehovah. In a similar manner the rainbow which appeared at the commencement of a later cosmic period, after the Noetic Deluge, is described by the Elohist writer as placed there by Elohim, as a special token of a covenant with man.

We are justified, therefore, in interpreting this Eden Shechinah as a nature phenomenon incidental to the climatic changes of the Edenic period. The term used by the Eden narrator in describing it suggests at once the auroral lights of the north as they appear in the higher latitudes of Asia. The narrator speaks of them without explanation, as the (well-known) wings of light and between them the flashing fire. This wonderful natural phenomenon, first appearing in connection with the cold which drove the first of the race southward to the warmer latitudes, would in its majesty and glory fitly represent to them a Jehovah Elohim Shechinah, whose light forever veiled and closed the Eden garden to man.

This "light dwelling" of Jehovah in the mountain of the north appears in the traditions of the descending streams of the human family from the east and the north. It is a tradition with which in the earliest Chaldean teaching the name *Yao* is associated. Later it became the mountain of Bel in the uttermost parts of the north. Herein we find an explanation of the address by the prophet Isaiah to the King of Babel who had said in his heart, "I will ascend into heaven, I will exalt my throne above the stars of Elohim, I will sit also upon the mount of hosts (starry hosts) in the uttermost parts of the north. I will ascend above the heights of the clouds. I will be like the Most High."

In a late form of the tradition of the mountain of Bel in the extremities of the north it is thus described: "I stepped forward till I came to a wall built of stones of crystal. A trembling flame surrounded it which began to put me in fear. Into this trembling flame I stepped, and I drew near to a spacious dwelling which also was built of stones of crystal. Its walls and its floors were of crystal, and of crystal was also the

ground. Its roof had the appearance of the twinkling of stars, and the flashing of lightning, and under them were cherubs of fire. A burning flame surrounded its walls and its portals darted forth fire. As I stepped into this dwelling it was hot as fire and cold as ice."

The first migration from the Adamah centre mentioned in the Genesis accounts is that of the Cainites eastward. The northern portions of the Asiatic and American continents, nearly joined at Behring Straits, would seem to have been the area of the first dispersion of the human race, which going on through the Tertiary period we may suppose gradually overspread the habitable portions of the globe. Remains of the human race belonging to the Tertiary period have been discovered in North America and in Europe and announced as the latest result of modern geological science in respect to the age of man upon the earth. Nothing could be more absolutely coincident with the Genesis records than these discoveries. Altho at the civilized centre of the Adamah it is stated that in this period the arts of metallurgy and music were well advanced, it is not to be supposed that the migratory nomads of the Cainite dispersion would have made use of any other than the rudest implements of stone and flint in their wanderings to the uttermost parts of the habitable earth. We assume then that the first distribution of the human race over the entire globe took place during the Tertiary, or remainder of the Edenic period, at the close of which, following the Genesis accounts, occurred the Noetic Deluge.

THE NOETIC DELUGE.

Throughout the Tertiary period the continents of Europe and Asia, as well as America, were making progress in their bolder surface features and in their extent of dry land, and the evidence is sufficient to show that when the period ended the continents had their mountains raised, in general, to their full height. This condition of things directly preceded the great change which initiated what is known in geology as the Quaternary, Glacial, or Drift period, which affected mainly the northern areas of the three continents, and caused the migration southward of the entire species of plants and animals. In the period of mammal

life this is the first continental convulsion of a universal character which absolutely changed the face of the north temperate zone in its relation to the life of man. As far as man is concerned it may be justly represented as universal, and was undoubtedly so viewed by the Elohist and Yahvist writers in their accounts of the breaking up of the fountains of the deep in the Noetic Deluge.

There are two accounts, Elohist and Yahvist, of this great event which changed the face of the inhabited world. The discrepancy between them is only apparent and not real. The Elohist writer uses two or a pair, in numbering the animals that were taken into the ark, and the Yahvist writer makes use of seven as the representative number. In both cases the number is designed to be left *indefinite*, but to express the idea that a sufficient number for all practical purposes were preserved. Representative numbers run through each account in respect to the age of Noah, the time employed in building the ark, the number of days of the rain, etc., all designed to express the idea that the event in all its parts was historic and complete, and under the superintendence of the God of Noah. These two accounts of the Deluge are paralleled by two accounts of the same event in the Izdubar tablets in which the nature deities of the Bel religion are represented as causing and superintending this universal destruction of human life. In the Deluge accounts of the Izdubar tablets we have a similar use of representative numbers as in the Noetic accounts. We would here remark that there is no more chronology intended to be conveyed in the Genesis account of the period measured by tens between Noah and Abraham than in the period of tens between Adam and Noah. A complete sacred or cosmic time *in double tens* was allowed from Adam to Abraham, a grand division of this Cosmic period being marked by the event which introduced the modern era, or the history of the ethnic races of to-day.

We have data in the Genesis records for defining the period of the Noetic Deluge. It must have been the great convulsion at the close of the Tertiary, or Edenic period, which broke up the Eden river into the four head streams of the historic rivers described by the Eden narrator, since at the close of the Tertiary, the continents having their mountains raised to their full

hight, the courses of those historic rivers must have been well defined. The convulsion which introduced the Quaternary, Glacial, or Drift period answers thus the conditions of the Genesis accounts as to the period of the Noetic Deluge.

In the Quaternary period the distribution of the three Noetic families from their respective historical and geographical centres took place over vast areas of the habitable earth and formed the second dispersion of the human race from Central Asia, and the first great distribution of the ethnic races as laid down in the race table of the sons of Noah. During the Quaternary period, which was shorter than the Tertiary, but still of great duration, the descendants of these three Noetic families had time to originate the diversities of race which had begun to develop in pre-Noetic times, and to take on the peculiar characteristics which mark the ethnic divisions of the modern or present era.

THE BABEL DISPERSION.

A special, or *Babel* dispersion is mentioned in the Genesis accounts as having taken place from the plain of Shinar on the occasion of the first attempt by "the children of Adam" to found the city of Babylon. This account directly introduces the genealogy of Arphaxad as the son of Shem and ancestor of Eber. It comes after the race table of the sons of Noah, and the distribution of the different families over the whole earth, with their division into nations after the flood. The genealogy of Arphaxad is carried down to Abram in Ur of the Chaldees, and it is stated that Haran died before his father, Terah, "*in the land of his nativity, in Ur of the Chaldees.*" This is the region assigned to Arphaxad son of Shem, in the race table of the sons of Noah. The name *Arphaxad* denotes "neighbor of the *Casdim*." According to the distinguished Assyriologist, *Sayce*, "the word *Casdim* is best explained by the Assyrian root "Casdu," "to possess" or "conquer," so that the Casdim will be those Semitic conquerors who first settled in Sumir or Shinar, and finally succeeded in extirpating the power and language of their Accadian predecessors." In connection with the above it is remarked, "The land of Kaldu or Caldu is first mentioned by Asurnatsirpal in B.C. 878, and in B.C. 850 his son Shalmaneser speaks of the district as lying below Babylonia on the Persian Gulf.

It was not till a later period that the Caldu occupied Babylonia, and under Merodach Baladan made themselves so important and integral a part of its population as to give their name to the whole country."

"Ur of the Casdim" or "Conquerors" was therefore the land of the nativity of the Arphaxad line. These "conquerors" were, according to Sayce, a Semitic people who drove out the Accadians, or "*Highlanders*," a population from Elam who had preceded them in the plain of Shinar. There must then have dwelt together from the earliest period of the occupation of the lower Euphrates region two branches of the Semitic family, one the descendants of Arphaxad, who appear to have preserved the Elohist and Yahvist records, and the other the descendants of Asshur, brother of Arphaxad. The Semites of the Asshur line in connection with representatives of every branch of the human family gave that colossal development to the Bel religion the evidences of which we find to-day on the plain of Shinar. *Asshur* then was the apostate branch of the sacred Semite line, and great must have been the adversative feeling between the two divisions when they dwelt together in the valley of the Euphrates.

The story of the Babel dispersion appears to belong to the Arphaxad family records. It is related of a people who came from the east to the plain of Shinar and dwelt there, and has the point of view of a narrator already on the ground who regarded these newcomers as interlopers. The tower which they attempted to build was to be dedicated to their god *Bel*, and called Babel, or gate of Bel. Sufficient time had elapsed since the flood for many dialects to arise in the universal language, and the plain of Shinar having been from the remotest times a centre for the gathering together of varieties of peoples and dialects, it is likely that misunderstandings on this account led to quarrels, and to the final abandonment of the work of building the tower, and to the scattering of the people engaged in it. The scattering was of the people, rather than of the language, the narrator stating that Jehovah did *at that spot* confuse the universal language so that Babel, "the Gate of Bel," became "*Balal*," *the city of confusion*. We look upon this lively narrative as simply an account in the Arphaxad records, by an old inhabitant, of the manner in which the first Babel builders came to grief in their attempt to make the Tower and Gate of Bel a world centre.

THE YAHVIST WRITER.

The Yahvist writer of the Babel account, in the strength of his adversative feeling, and dramatic way of presenting historic events, bears a strong resemblance to the Yahvist narrator, not only of the Eden apostasy, and the career of Cain and his descendants, but also to the Yahvist historian of the Noetic Deluge. There is a unity of purpose evident in his short histories, viz.: to show Jehovah Elohim as the manifesting Elohim of the Sethite sacred line working against and punishing the crimes of the "sons of men" or "sons of Adam," Adam being the representative apostate from the Jehovah Elohim religion. The Elohists, or "Sons of Elohim," and Yahvists were both adherents of the primary Garden religion, but the Yahvists appear to have been the special representatives of the Messianic expectation founded on the Edenic promise. The origin of this school of Elohists is given as in the days of Enos the son of Seth.

Throughout the whole compilation of these accounts, from Adam to Abraham, this distinction between the "Sons of Elohim" and the sons of Adam, the primary apostate to the nature religion, is a key to the understanding of the history intended to be conveyed in these records. It is a key to the serpent story of Eden, to the career of the pre-Noetic Cainites, and to the account of the first attempt by the children of Adam to re-establish the worship of Bel in the plain of Shinar, and the means employed by Jehovah, the God of the Sethites, to frustrate their work. This Yahvist writer is from the beginning to the end of his histories *upon the Euphrates*, since in the Eden narrative he states that to be the river on which he is located. His style is maintained throughout all the Yahvist accounts down to that of the Babel narrative given from the same Euphrates standpoint. His point of view is that of a recorder of the Arphaxad line, and of that family in its early residence in the Euphrates valley. The statement which he throws in, that Arphaxad was born two years after the flood, connects very closely his own records with those of pre-Noetic times. These records provide then for the handing down of the Sethite cosmogonic ideas and traditions through Noah to the descendants of Arphaxad, in which branch of the Semitic family the sacred line was continued in shortening periods of individual lives to Abraham. These Sethite cos-

mogonic ideas were those of the Elohist cosmogony, and of the Garden period. Everywhere throughout the sacred books of the Hebrews and the writings of the Apostles appear expressions and conceptions framed upon the standpoint of this cosmogony, which cannot be explained as derived from any other source, and are only interpreted in the grandeur of their conceptions by the light of the latest results of geological science. They are paralleled by similar conceptions of immense cosmogonic periods constituting the framework of the most ancient religions. The religion of which they constitute the background, in the Sethite line of Elohists and Yahvists, was that of a Yahveh Elohim companionship of the first of the human race in the Garden period of their existence upon earth. This religion of the Yahveh Theophany in the Garden time of the Edenic period is paralleled and explained by the later Messianic Theophany in Palestine, from which Theophany the Christian religion is professedly derived. To hold to the one and deny the other is, critically, an absurdity, since they are stated to be vitally connected one with the other, and the later Theophany claims to found itself historically upon the earlier. To profess respect for the Christian religion as divinely instituted, and yet deny its roots in the past to which it lays claim, is to throw away reason and common-sense. If it has no roots in the past, it should be cast out as a withered branch, and will be. If it has no relation to the protology of man, it is of little consequence what it teaches concerning his eschatology. Whatever may be said of the accounts of a primary religion handed down through the descendants of Eber in connection with the history of the Messianic Theophany in Palestine, there can be no doubt that the whole taken together is a unit, and both portions must stand or fall together. The standpoint of the New Testament writers is that the life of the human race upon earth has extended through cosmic periods, in the last days of one of which "God has spoken to us by his Son, whom he hath appointed heir of all things, and by whom he made the worlds;" and it is indicated in their writings that we are approaching another cosmic period, or change to the new heavens and the new earth, wherein dwelleth righteousness. and wherein, in the moral development of the race, we shall have the survival of the fittest.

THE PRINCIPLES OF TAXATION.

ACCORDING to an eminent German financier, Hoffmann, it would be difficult to find in the whole realm of political economy a subject more generally misconceived, more disfigured by false views, more degraded by a partial study, than Taxation. "If," adds M. de Parieu, himself the author of the ablest French work on the subject, "this proposition appeared true in a country where the problem of instruction in administration has for a long time been studied, it is probably still more so in France, where the practice is even further separated from the science of administration."

The body of English literature in finance is shabby in the extreme. Most of our political economists have not dealt with the subject at all, or have done so very perfunctorily. Adam Smith, indeed, gave to taxation about one fourth of his "Wealth of Nations," but his treatment is far from satisfactory. Ricardo entitled his great work "The Principles of Political Economy and Taxation;" and as a study of the propagation of an economical impulse from object to object and from class to class, Ricardo's discussion of taxation is masterly; but it furnishes only the skeleton of a treatise on the subject, while its underlying assumption of perfect, uninterrupted, unimpeded competition necessarily makes many of his conclusions grossly inconsistent with the facts of industrial society. J. R. MacCulloch did not treat of finance in his "Political Economy;" but he discussed taxation and the funding system in a separate work. This completes the roll of systematic English writers on taxation whose works are really worth mentioning. Mr. Gladstone's budget-speeches and Mr. Newmarch's papers on the National Debt are the only important contributions to finance which have been made in this generation.

Perhaps as good an idea of the feebleness and emptiness of the English literature in this department can be obtained as in any other way by referring to Adam Smith's maxims respecting taxation. Dr. Smith proposed four maxims, or principles, "which," says Mr. Mill, "having been generally concurred in by subsequent writers, may be said to have become classical." Probably two thirds of all English writers on political economy since Smith have referred to these rules, and more or less fully quoted them as of vast significance; many have adopted them entire, and made them the basis of their treatment of the subject of taxation.

The first and most important, as it is the most famous, of these rules concerns the ground of assessment, as follows: "The subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their several abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state."

This maxim, tho it sounds fairly, will hardly be found on examination to deserve the attention it has received. What mean those last words, "under the protection of the state"? They are either irrelevant, or else they mean that the protection enjoyed affords the measure of the duty to contribute. Now, the doctrine that the members of the community ought to contribute to the public support in proportion to the benefits they derive from the protection of the state, or according as the services performed in their behalf cost less or cost more to the state, which is the view of taxation known as the Social-Dividend theory, involves practical absurdities of the grossest character. Those who derive the greatest benefit from the protection of the state are the poor and the weak—women and children and the aged; the infirm, the ignorant, the indigent. The man of wealth can in a degree protect himself. He is not brought, in the pursuit of his interests, into dangerous situations; while at home he can defend himself from violence by appliances beyond the reach of the cottager.

Even as among the well-to-do and wealthy classes of the community does the protection enjoyed furnish a just measure of the duty to contribute? If so, then the richer the subject or citizen is, the less, proportionally, should he pay, since the cost

of protecting wealth in single hands increases at a lower ratio than the wealth itself. It is easier to guard and keep from harm \$100,000 located in one place than the same amount distributed among twenty places. A man who buys protection in large quantities should get it at wholesale prices, like the man who buys flour and meat by the car-load. Moreover, it costs the state less to collect a given amount from one taxpayer than from many.

Returning to the maxim of Dr. Smith, I ask, does it put forward ability to contribute, or protection enjoyed, as affording the true basis of taxation? Which? If both, on what principles and by what means are the two to be combined in practice?

But if we take the last six words as merely a half-conscious recognition of the popular protection theory, or Social-Dividend theory, of taxation, and throw them aside as inconsistent with Dr. Smith's real intention, we shall still find this much-quoted maxim far from satisfactory: "The subjects of every state should contribute towards the support of the government as nearly as possible in proportion to their several abilities; that is, in proportion to the revenue which they respectively enjoy."

But is the ability of two persons to contribute necessarily in proportion to their several revenues? Take the case of the head of a family having an income of \$500 a year, of which \$400 is absolutely essential to the maintenance of himself and wife and children in health and strength to labor. Is the ability of such a person, who has only \$100 which could possibly be taken for public uses, one half as great as that of another head of a family similarly situated in all respects except that his income amounts to \$1000, and who has therefore \$600 which could conceivably be brought under contribution? Manifestly not.

We shall, then, still further improve Dr. Smith's maxim if we cut away all after the first clause: "The subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their several abilities." The maxim as it stands is unexceptionable, but does not shed much light on the difficult question of assessment. Still, in recognizing ability and not protection enjoyed, or other benefits derived, as

affording the measure of the duty to contribute, it has a certain value.

The best statement I have ever met of the principle of contribution based on ability is contained in an article in the *Edinburgh Review* of 1833: "No tax is a just tax unless it leaves individuals in the same relative condition in which it finds them." What does this precept, which we may call the leave-them-as-you-find-them rule of taxation, demand? In seeking an answer to this question, let us inquire, historically, what bases have been taken for assessment. We note four:

1. Contribution has been exacted on the basis of Realized Wealth, commonly spoken of as capital.
2. On the basis of Annual Income.
3. On the basis of Faculty, or native and acquired power of production.
4. On the basis of Expenditure, or the individual consumption of wealth.

These are the four historical bases of taxation. Let us see how far each in turn answers the requirement of Dr. Smith's maxim that the subject should contribute according to his ability; of Sir John Sinclair's maxim that the state should only exact what the subject ought spontaneously to have given; of the Edinburgh Reviewer's maxim that the tax ought to leave the members of the community in the same relative condition in which it finds them.

And, first, of Realized Wealth as the basis of assessment. Wealth is accumulated by savings out of revenue. If, then, wealth alone is to be taxed, it is saving, and not production, which contributes to the support of the state. Economically there cannot be a moment's doubt that for government thus to draw its revenue from only that part of the produced wealth of the community which is reserved from immediate expenditure, either for assurance against future ills and provision for future wants, or for active employment in current production, must be in greater or less degree prejudicial. The question also arises, where is the political or social justice of such a rule of contribution? If my income belongs to me, to spend for my own comfort and gratification, without any deduction for the uses of the state, how do I lose my right to any part of it because I save it?

When we turn to Revenue we seem, waiving for the present the objection arising from the different ratio which the necessary cost of subsistence bears to different incomes, to have reached a rule of equitable contribution. Economically speaking, it ought not to be brought into question that the revenue of the state should be drawn from the revenue of the community rather than from its realized wealth or capital. Yet the rule of contribution according to revenue is subject to grave impeachment on grounds of political equity.

Here are two men of equal natural powers. One is active, energetic, industrious; he toils early and late and realizes a considerable revenue, on a portion of which the state lays its hand. The other lets his natural powers run to waste; trifles with life, lounges, hunts, fishes, gambles, and is content with a bare and mean subsistence. Was his duty to contribute to the support of the state less clear or less in degree than that of the other? If not, how has his idleness, shiftlessness, worthlessness, forfeited the state's right to a contribution from him in proportion to his abilities?

We must, I think, conclude that, while to tax wealth instead of revenue is to put a premium upon self-indulgence in the expenditure of wealth for present enjoyment, to tax revenue instead of faculty is to put a premium upon self-indulgence, in the form of indolence, the waste of opportunities, and the abuse of natural powers.

Passing for the moment by our third title, we find that the fourth basis taken for taxation has been Expenditure. This must not be confounded with taxes on consumption, as constituting a part of a tax system in which taxes on realized wealth, taxes on revenue, taxes on faculty, one or all of these, also appear. Nor do we speak here of taxes on expenditure imposed in practical despair of an equitable distribution of the burdens of government. We are now concerned with expenditure only as the single basis of taxation, in the interest of political equity.

"It is generally allowed," wrote Sir William Petty, two hundred years ago, "that men should contribute to the public charge but according to the share and interest they have in the public peace; that is, according to their estate or riches.

"Now, there are two sorts of riches, one actual and the other potential. A man is actually and truly rich according to what he eateth, drinketh, weareth, or in any other way really and actually enjoyeth. Others are but potentially and imaginatively rich who, tho they have power over much, make little use of it, these being rather stewards and exchangers for the other sort than owners for themselves.

"Concluding, therefore, that every man ought to contribute according to what he taketh to himself and actually enjoyeth, the first thing to be done is," etc. etc.

Arthur Young seems to have taken the same view. After saying that every individual should contribute in proportion to his ability, he added in a note: "By ability must not be understood either capital or income, but that superlucration, as Davenant called it, which melts into consumption."

Mr. William Minot, Jr., of Boston, author of a pamphlet on Taxation which has deservedly attracted much attention, sets forth the same principle of contribution: "Every man ought to be taxed on all that property which he consumes or appropriates to his exclusive use."

In this view of taxation, so far as any member of the community possesses wealth in forms available for the future production of wealth, he is regarded as a trustee or guardian, in that respect and to that extent, of the public interests. Just this is said by Young—taxes "can reach with propriety the expenses of his living only. If they touch any other part of his expenditure, they deprive him of *those tools that are working the business of the state.*" Wealth only becomes selfish, only becomes exclusively or primarily of individual advantage, when it is applied to eating, drinking, wearing, or in any other way really and actually enjoying, to use Sir William Petty's enumeration of the modes of personal consumption.

But is it only eating, drinking, wearing, or some other of the modes of personal consumption, which constitutes such an individual appropriation of wealth as to make its use selfish, and thus bring it within the proper scope of taxation? Suppose a man buries his money in the ground? Mr. Minot anticipates this very case, and answers, he should be taxed "because he appropriates it exclusively." This is clear enough, and saves Mr. Minot's principle. But suppose that a weak, sanguine, vain-glorious, or wilful owner of wealth applies it to what are

intended to be productive enterprises, but to such as are foolish, unjustified by the existing conditions of industry or trade, likely to result in loss and waste. Let us assume such an investment to have taken place: a canal, for example, for which there was no adequate occasion, to have been half constructed. The theory of the equities of taxation which we are considering maintains that, not when this wealth was first created and became revenue, had the state a right to excise it for public uses, because it had not then been selfishly appropriated to personal enjoyment; not when it was saved out of revenue and became wealth, did the state acquire the right to take any portion of it for public uses; since it had not yet passed into consumption; and that at no stage, from its creation to its final dissipation and disappearance as wealth, did the state obtain any claim upon any portion of it, because no individual had derived an exclusive benefit from it. And yet the community derived no benefit from it.

I do not see but that, if capital, or revenue in excess of personal expenditure, is to be exempted from taxation, on the plea that it has not yet become the subject of individual and exclusive appropriation and is, therefore, presumably held and used in a way which primarily benefits society, the state has the right to inquire whether the use made or proposed to be made of wealth is such as will in fact benefit society, and benefit society, moreover, in the highest degree of which it is capable.

The citizen, using Mr. Minot's argument, says to the state, "You must not tax, excise, cut anything off, this wealth I hold, because I have not yet appropriated it exclusively to myself. Indeed, I am going to use it for the benefit of society." The State rejoins: "Yes, but of that we must satisfy ourselves. We must be the judge whether your use of your wealth will benefit society. Pay your taxes, and you can do with your wealth as you like. Claim exemption on the ground of public services, and you rightfully come under state supervision and control."

The fallacy of the theory we are considering lies in the failure to recognize the fact that the selfish and exclusive appropriation and enjoyment of wealth are inseparable from its

possession. The pride of ownership, the social distinction which attends great possessions, the power which wealth confers, are additional to the merely sensual enjoyment to be derived from the expenditure of a portion of the revenue from a rapidly accumulating estate. Would I resent the interference of the government, or of my neighbors, in the management of my property, upon the ground that it was not being used to the highest advantage of the community? What is that resentment but the proof (and the degree of that resentment, the measure) of a personal appropriation, an exclusive appropriation, of that wealth? My resentment would spring out of the deeply seated feeling that my management of my own property is my right; and that he who should deprive me of it would take from me what is as truly mine as the right to eat, drink, wear, or otherwise consume and enjoy any portion of it; that, short of absolute mental incapacity, it is my prerogative to control my own estate, even tho not to the highest advantage of the community or even of myself; in other words, that I am not a trustee, but a proprietor.

This doctrine of the trusteeship of Capital is not more irrational than it is socially dangerous. It is held by men who are fierce in denouncing graded taxation as confiscation; yet it is, in its very essence, communistic. If the owner of wealth is but a trustee; if "his tools are working the business of the state," then the real beneficiary may enter and dispossess the trustee, if any substantial reason for dissatisfaction as to the management of the property exists; the state may take the tools into its own hands and "work its business" for itself.

The objections which have been stated against the view that expenditure, exclusive, personal appropriation of wealth, furnishes the measure of the citizen's duty to contribute, are, it should be noted, additional to the objection previously made to the view that revenue furnishes such a measure. To admit expenditure as the true theoretical basis of taxation is to confess that, if the citizen is indolent and content with a scanty expenditure, the state has a smaller claim upon him for contribution than it has upon another who is active, energetic, and ambitious, and therefore earns and spends more freely.

I reach, then, the conclusion that Faculty, the power of pro-

duction, constitutes the only theoretically just basis of expenditure ; that men are bound to serve the state in the degree in which they have the ability to serve themselves.

I think we shall more clearly see Faculty to be the true natural basis of taxation if we contemplate a primitive community, where occupations are few, industries simple, realized wealth at a minimum, the members of the society nearly on a level, and the wants of the state limited. Suppose, now, that a work of general concern, perhaps of vital importance to the community, requires to be constructed : a dyke, for instance, against inundation, or a road, with occasional bridges, for communication with neighboring settlements. What would be the rule of contribution ? Why, that all able-bodied persons should turn out and each man work according to his faculties, in the exact way in which he could be most useful.

In regard to a community thus for the time engaged, we note two things : first, that no man would be held to be exempted because he took no interest in the work which had been decreed as of general public concern ; that he would not be allowed to escape contribution because he was willing to relinquish his share of the benefits to be derived, preferring to get a miserable subsistence for himself by hunting or fishing ; secondly, that, between those working, a higher order of faculties, greater muscular power, or superior skill would make no distinction as to the time for which the individuals of the community should severally remain at work.

This is the ideal tax. It is the form of contribution to which all primitive communities instinctively resort. It is the tax which, but for purely practical difficulties, would afford a perfectly satisfactory measure of the obligation of every citizen to contribute to the sustentation and defence of the state. Any mode of taxation which departs in essence from this involves a greater or smaller sacrifice of the equities of contribution ; and any mode of taxation which departs from this in form is almost certain to involve also a departure in essence.

And it deserves to be noted that the greatest tax of modern times, even in the most highly organized societies of Europe, the obligation of compulsory military service, is assessed and collected on precisely this principle. In nearly all the empires

and kingdoms of Continental Europe the requirement of personal service for an equal period presses alike on rich and poor, high and low. Exemptions are indeed allowed, but always on the theory that the persons exempted will in reality serve the state more to its advantage by remaining in their ordinary professional capacities.

But while the tax on Faculty is the ideal tax, it has usually been deemed impracticable, as the sole tax in a highly complicated condition of industrial society. As occupations multiply and the forms of production become diversified, it is found that the state cannot to advantage call upon each member by turns to serve in person for a definite portion of each day or of the year. Hence modern statesmanship has invented taxes on expenditure, on revenues, on capital, not as theoretically just, but with a view to reduce the aggregate burden on the community, and to save production and trade from vexation and obstruction.

Will the International when its day comes, when it controls, as it boasts it soon will do, the destinies of states, make good its vaunt of seeking political justice without fear or favor, by doing, in this matter of public contribution, what the conservative or cowardly politicians of the existing order have not ventured to undertake, viz., to bring faculty universally under contribution, if not in the form of personal labor, then by taxation proportioned to natural abilities? Will it dare to say that the state does not lose its claim on any man by reason of his indolence, his self-indulgence, his want of self-respect or social ambition; that the fact that he is content to earn a miserable subsistence, and thus escapes wholly or mainly from taxes on revenue or expenditure, shall not be held to relieve him from the duty of contributing to the public wants according to his natural powers equally with the most industrious and thrifty of his fellows? Will the International dare to lay the scourge on the backs of the lower elements of society, the gunning, fishing tribe, the shiftless squatters upon land, the loafers on the streets, the loungers in the bar-rooms, and drive them to work their allotted time for the state, if they will not work for themselves and those whom a mysterious providence has made dependent on them? If the International shall undertake this, it will vindicate the sincerity of its pretensions to reform society.

If it shall succeed, it will prove its right to govern. Should it fail, it will at least have nobly dared and nobly tried.

But if, under the leadership of the greedy, guzzling crew who in our city bar-rooms mingle the froth of their beer with frothier declamation about the rights of man and denunciation of employers and capitalists, the International shall, when it comes to power, seek fiscal reform by imposing still heavier penalties on industry and frugality, through increasing taxes on revenue and capital, to be squandered in finding employment for a mob that cares not for accumulating a store, has no purpose to make a home, and is content to live squalidly and precariously at the cost of those who work and save, the result can be predicted with entire confidence. I feel no assurance that the International, by which term I include all those elements that aim at a radical reorganization of political and industrial society, will not during the present century rise to power in more than one civilized country; but I feel the strongest assurance that if the International shall ever come to wield the powers of the State, and shall use them to let the unthinking, spending mob live at the cost of those who work and save and plan, it will be hurled

"With hideous ruin and combustion down
To bottomless perdition."

Nothing fights like property: not even hunger. There is no race of men, raised much above the savage state, where the two thirds who have not can stand long against the one third who have.

The politicians of the existing order, as we have seen, shrink from the effort involved in levying the public contributions entirely, or even chiefly, according to faculty. Next in point of political equity comes the tax on incomes, or the revenues of individuals. That tax, as it stands in contemplation of the writer on finance, is a tax on the revenues of all classes, with exception only of the amount requisite for the maintenance of the laborer and his family, after the simplest possible manner, in health and strength to labor. It is not a compensatory tax, constituting a part of a system in which realized wealth and various forms of expenditure are also brought under contribution, but the sole tax imposed by the state.

It has been said that from such an income tax the necessary cost of subsistence must be exempted. Mr. Wells has, in a recent paper, laid down two propositions: first, that "any income tax which permits of any exemption whatever is a graduated income tax;" and secondly, that "a graduated income tax to the extent of its discrimination is an act of confiscation." But the exemption of a certain minimum annual revenue is a matter of sheer necessity, whether the state will or no. Economically speaking, it is not possible to tax an income of this class. A man in the receipt of such an income cannot contribute to the expenses of government. That income being only sufficient to individual necessities, no part of it can be applied to public uses. Should the state, with one hand, take anything from such a person as a taxpayer, it must, with the other, give it back to him as a pauper.

Conceding the exemption, on purely economical grounds, of the amount required for the maintenance of the laborer's family, one of the most vital questions in finance arises immediately thereupon; to wit, shall the excess above this minimum, shall the superfluity of revenue, which may be spent or saved at the will of the owner, be taxed at a uniform rate, or at rates rising with the increase of income?

The question of progressive or progresional taxation has always been one of great interest while the fiscal policy of states rested with the wealthy and well-to-do classes. It is certain to acquire vastly greater importance as political power passes more and more into the hands of the class of small incomes. Upon the question of the equity of progressive taxation writers on finance are divided: one party holding that any recognition of this principle is sheer confiscation; the other admitting that progressive taxation may be carried to a certain point without injury either to the sense of political justice or to the instincts of industry and frugality, some even holding with J. B. Say that "taxation cannot be equitable unless its ratio is progressive." Both parties agree that there is great danger that, under popular impulse, progressive taxation may be carried so far as not only to violate all the equities of contribution but seriously to shock the habits of acquiring and saving property.

The system of progressive taxation prevailed at Athens.

There were four Solonian classes of citizens, arranged according to wealth. Of these the first paid no taxes ; the class next above them were entered on the tax-books at a sum equal to five times their income ; the next class at ten times their income ; the richest class at twelve times their income. This Solonian census was, in its main principles of graduation, retained after the constitutional changes of 378 B.C., tho' considerable modifications of the register were made. A progressive income tax was introduced into Florence in 1442 ; and was maintained, with changes as to rates, until 1495.

The principle of graduation, or progressive taxation, was a favorite one with the statesmen of the French Revolution. It was for a time adopted by the Convention in 1793. In consequence, perhaps, of the appetite thus created among the people for laying the burdens of government mainly on the rich, many of the later French writers on finance have been very strenuous in denouncing the principle. "Progressive taxation," says Maurice Block, "cannot be justified by science. It can only be defended by an argument inspired by jealousy. My neighbor, being more robust, supports his charge more easily than I : increase his burden. Then should you tear out one of your neighbor's teeth, or pluck out one of his eyes, because you have the misfortune to have suffered a like loss."

Yet this system was approved, as we saw, by Say, and also by Montesquieu. In the personal tax, wrote the author of the "Spirit of Laws," "the unjust proportion would be that which should follow exactly the proportion of goods." Referring to the Solonian Categories at Athens, he said : "The tax was just, tho' it was not proportional. If it did not follow the proportion of goods, it did follow the proportion of needs. It was judged that each had equal physical necessities, and that those necessities ought not to be taxed ; that the useful came next, and that it ought to be taxed, but less than what was superfluous ; and lastly, that the greatness of the tax on the superfluity should repress the superfluity."

In 1848, at the Revolution, the idea of progressivity was revived. The provisional government in a decree said : "Before the Revolution taxation was proportional ; then it was unjust. To be truly equitable taxation must be progressive."

The project of progressive taxation was beaten in the Assembly by the earnest opposition of M. de Parieu.

M. Joseph Garnier, editor of the *Journal des Economistes*, makes a distinction between progressive taxation, properly so called, and progressionary taxation. It is, he says, against the first that all the objections are directed which we find in writers who declare that progressive taxation is a species of confiscation, tending to the absorption of great fortunes by the state, to the levelling of conditions, to the destruction of property, to the discouragement of frugality and industry, to the emigration of capital, etc. There is, M. Garnier holds, a species of increasing taxation which is rational and discreet, to which he applies the term progressionary, which is held within moderate limits, which is collected by virtue of a tariff of duties slowly progressive, and which, at the maximum, cannot pass beyond a definite portion of the income of the individual. Such would be, he says, a graduated tax which should demand from a revenue of 500 francs, zero; from a revenue of 600 francs, a something; from a revenue of 700 francs, that something and that which in arithmetic we call the ratio of increase; from a revenue of 800 francs, that something and twice the ratio; from a revenue of 900 francs, that something and thrice the ratio; and so on, according to a scale of duties calculated from the lowest to the highest, never passing a moderate maximum. "Thus," he concludes, "taxation can be progressive without being confiscatory."

In Prussia the tax on small incomes, known as the *Klassensteuer*, is levied on a scale of 12 degrees.

In England the principle of progression has never been admitted into the income tax further than is involved in the exemption of a certain minimum. How the subtraction of a constant amount from all incomes, and the taxation of the excess at a uniform rate, causes the rate on the total incomes to rise, from lowest to highest, will appear from the following table.

If we suppose the constant amount exempted to be \$1000 and the rate of taxation on the excess to be ten per cent, incomes of different amounts will in effect be taxed as follows:

Income.	Income subject to Taxation.	Amount of Tax.	Rate of Taxation on Total Income.
\$1500	\$500	\$50	3.33 + per cent.
2000	1000	100	5 "
2500	1500	150	6 "
3000	2000	200	6.66 + "
3500	2500	250	7.14 + "
4000	3000	300	7.5 "
4500	3500	350	7.77 + "

But while the principle of progressivity has never been admitted into the income tax of England, it has been extensively applied to the so-called "Assessed Taxes;" that is, taxes on carriages, horses, servants, etc.

Four successive claims may be set up in behalf of the principle of Progressivity in Taxation. Two of these the economists generally and the best writers on politics refuse to recognize. The two remaining are open to argument, and, in their proper measure, seem to me valid.

1. That the possession of large amounts of property, or the receipt of large incomes, signifies, in addition to economy and industry, an original endowment of exceptional talents, the happy possessor of which is bound to minister to those less gifted.

2. That, in addition to economy and industry and to natural ability, the possession of large amounts of property or the receipt of large incomes signifies good fortune. Fire, flood, wreck, accidents of character, accidents of circumstance, wholly beyond the power of man to determine, are powerful factors in placing the members of a community up or down on the scale of wealth.

Neither of these considerations is admitted by the majority of economists or of political writers of eminence as relevant to the question of progressive taxation. It is peremptorily denied that it is the office of the state to redress inequalities of natural gifts or of fortune.

3. A third reason for progressivity, which, it seems to me, the economist and the political philosopher may legitimately recognize as of some force in this connection, is found in the undoubted fact that differences of property and income are due,

in no small degree, to the failure of the state in its duty of protecting men not only against violence but against fraud.

The fact of such failure is unquestionable, and the effects are not of narrow range. One man is poor because at a certain time his house, his barn, his mill, his store, was burned down through the inefficiency of a semi-political fire department or by the malice of rogues whom the state, had it been sufficiently alive to its duties, would have hindered in their design, or would have impounded previously for some other act of villainy. Another man is poor because the state, having set up a gigantic corporation, a bank, a savings bank, a trust company, or a railroad, and having endowed it with extraordinary franchises and powers, has failed of its duty of superintendence and control over the artificial person thus created, and has left it to prey upon the community. Another man is poor because the state, having undertaken to enforce the obligation of contracts and to secure justice between man and man, has failed to protect him against fraudulent bankruptcies or clever rascalities of some one of the many species known to the commercial world.

Suppose no man became rich, or acquired any part of his riches, through the failure of the state to do that which it is bound to do; suppose no man became poor from any such cause, is it to be questioned that the dividing line between those who have much and those who have little, between those who have something and those who have nothing, would be drawn very differently from what it is at present?

4. A fourth reason urged for progressive taxation is that differences of wealth are, in a measure, due to the acts of the state itself, having a political purpose, as treaties of commerce, tariffs, currency legislation, embargoes, non-intercourse acts, wars. For example, it is of the very nature of war, or of a mere threat of war, to enrich certain classes of producers and exchangers and to impoverish others. A declaration of war by the United States against England would cause within a month an advance of ten, twenty, or fifty per cent in certain lines of commodities, of which the average stock amounts to hundreds of millions of dollars. Can any one doubt that the differences in wealth which would otherwise have existed in New England during the first quarter of the century were greatly aggravated by the purely

political measures of the period 1807-1815, the embargo, then the non-intercourse acts, and afterwards the three years' war? That all changes in the money systems of nations, whether by way of contraction or inflation, or of changes in the "standard," cause wholesale changes in the distribution of wealth, has passed beyond dispute. Tariffs and treaties of commerce are certain to act in the same direction, if not with equal effect.

In view of the last two considerations adduced, it is argued, not without show of reason, that where differences of wealth may fairly be presumed to be due in a measure to the state's own acts of omission or of commission, allowance therefor should be made in assessing the members of the community for contribution to the public treasury.

The question is a very nice one in theory, while in its practical application it is beset with the gravest difficulty arising out of the instincts of spoliation which are deeply rooted in the human breast, an inheritance from ages of universal warfare and robbery. The appetite for plundering the accumulated stock of wealth once aroused may become a formidable social and political evil.

Were the highest human wisdom, with perfect disinterestedness, to frame a scheme of contribution, I must believe that the progressive principle would in some degree be admitted; but in what degree, and by what means, I am at a loss to suggest.

That progressive taxation will be the demand of the International, as it was of the Revolutionists of 1793 and 1848, we already know. That progressive taxation will be urged in the spirit of spoliation and confiscation is most probable. The friends of the existing order will do well to be prepared to take their ground intelligently and maintain it with firmness and temper. Certainly it is to be hoped that the orthodox economists of the United States will meet the question of progressivity in taxation with more candor and more, if I may venture to say so, of knowledge than they have shown in the recent contest over fiat-money. "Robber" will be found as poor an argument in the one case as "lunatic" proved to be in the other.

It has seemed most fitting to discuss the principle of progressivity in connection with the taxation of incomes, tho that

principle may likewise be applied to the taxation of capital, and introduced into taxes on expenditure, to which, in despair of taxing revenues to the full extent of the wants of the state, modern financiers have more and more inclined. While, as the sole tax, the tax on revenues has been approved, on grounds of political justice, by many, perhaps most, writers on finance, it has generally been rejected as impracticable in view of difficulties in assessment affecting incomes both high and low, more indeed the higher than the lower, and difficulties of collection affecting especially, and almost solely, incomes of the lowest class. Few writers of reputation have, without qualification, advocated such an income tax as both politically expedient and economically advantageous; and fewer statesmen have had the courage to propose it to the legislature.

Revenue, or income, having, then, been abandoned generally throughout modern society as the sole basis of taxation, and in exceptional cases only forming even an important feature of existing tax systems, Expenditure has been resorted to increasingly, in the past and present century, from considerations not so much of political equity as of political and fiscal expediency. By far the greater portion of the revenue of the most advanced states is derived from taxes on consumption, as they are called, and still every new demand of the treasury is met mainly from this source.

Yet even now Realized Wealth is still employed in many communities as the sole basis of taxation, the measure of the obligation to contribute to the support of government. It was the preferred form of taxation throughout the American colonies, when the value of land was small and rents were seldom paid by tenant to landlord. It is still the principal form of non-federal taxation in the United States, as the Grand Lists of townships, cities, and counties testify.

How can a tax on realized wealth or capital be justified?

Let us take two cases: first, when income is not taxed; secondly, when income is taxed.

First, when income is not taxed. It is claimed that the result of realized wealth affords the best practical measure of income or of productive faculty. Now, that such a claim in behalf of a property-tax should be conceded, or even seriously con-

sidered, clearly requires two things: first, that the ne'er-do-wells shall be comparatively few in number; and secondly, that the disposition to save out of income for the accumulation of wealth shall be the general rule in the community. These requirements were met in the American colonies generally, and especially in New England. Barring the effects of intemperance on the physical and moral nature, it was a rule with few exceptions that Americans in those times were disposed to labor, and to labor hard, that they might produce wealth; while so general was the desire of wealth, so stalwart the manhood of those times, so simple the habits of the people, so high the social importance attributed to the possession of capital, that all the surplus above decent, wholesome subsistence, after adequate provision for intellectual and religious culture, was likely to go towards accumulation.

The mere statement of these elements of the case suffices to show the difficulties besetting such a principle of taxation in its application to communities like those of the present day, with a less stringent public sentiment, with more extravagant modes of living, with less general elevation of tastes and ambitions, with greater proneness to self-indulgence. In such a state of society, to tax only that part of revenue which is laid by for future consumption, or to assist in the further production of wealth, is both politically unjust and economically vicious, exciting to extravagance and discouraging frugality.

Secondly. But if a tax be imposed on income, how can a property-tax be justified at all? Have not the whole community been once taxed upon income, as affording a measure of the ability to contribute to the public service, and shall now a portion of the wealth so excised be again subject to deduction on no other ground than that it has been saved, presumably to assist in future production?

Such a tax can only be defended, if at all, by the arguments which we have already considered in advocacy of the progressive tax on incomes, viz., those drawn from the admitted delinquency of the state itself. Just as it is argued that differences in income are in a measure due not to the differences in the merit of individuals, but to the acts of the government, creating a presumption that the recipients of the larger incomes have,

as a class, suffered in a lower degree than the average from such delinquency of the state, or perhaps have even profited by it; so it may be argued, not without show of reason, that in the passage of income into capital, the failure of the state fully to discharge its duty of protecting wealth against fraud and violence, and the positive acts of the state for its own purposes, like currency legislations, tariffs, commercial treaties, embargoes, non-intercourse acts, and wars, exercise a powerful influence in creating differences in accumulated wealth, irrespective of the merit of individuals, so that, as between those who have much and those who have little, between those who have something and those who have nothing, it may be assumed that the inferiority in one case, the deficiency in the other, are due, in a degree, to the acts of the state, either of omission or of commission.

Mr. J. R. MacCulloch proposed a solution of the much-vexed question as to the basis of taxation, which, so far as I know, has not been accepted frankly and squarely by a single well-known writer on finance, yet for which a great deal may be said. "The distinguishing feature of the best tax," said Mr. MacCulloch, "is not that it is most nearly proportioned to the means of individuals, but that it is most easily assessed and collected, and is, at the same time, most conducive to the public interests."

This, which may be called the purely economical theory of taxation, abandons the attempt to follow out the equities of contribution, and, in their stead, adopts the rule of the greatest good to the greatest number, holding that the interests of production and exchange and the facility and economy of collection are alone to be considered in the imposition of taxes. The line of reasoning which leads up to Mr. MacCulloch's conclusions may be stated as follows: Government springs from injustice, and, in the constitution of things, must commit more or less injustice. It is of no use to attempt to pursue the equities of contribution: they will elude you. It is admitted that it is impossible to distribute equally the benefits of government; why make the hopeless effort to apportion its burdens with absolute justice? Get the best government you can; maintain it at the least expense consistently with efficiency; and collect the revenue for the service by the most convenient, simple, and inexpensive means. By undertaking to effect an equitable apportionment of the bur-

den, through complicated methods or by personal assessment, you are not only likely to fail; you are certain, at the best, to add to the aggregate cost of the service, and are in great danger of generating new and distinct evils by disturbing economical relations and obstructing the processes of production and exchange.

I said that no well-known writer following Mr. MacCulloch has, to my knowledge, fully accepted his conclusion that the best tax is not that which is most nearly proportioned to the means of individuals, but that which is most easily assessed and collected and, at the same time, most conducive to the public interests. But while writers on finance have almost without exception insisted that the equities of contribution should govern in assessment, a belief in the so-called Repercussion, or diffusion, of taxes has led economists very generally to give their approval to the system of indirect taxation, the growth of which forms the most marked feature of the fiscal history of the present century.

In this view it is claimed that it is through the insensible diffusion of indirect taxes, whether taxes upon consumable articles or taxes upon the agencies or acts of production and exchange, that the most equitable distribution of the burdens of government will be effected. Taxation of individuals, according to their supposed means, must always, it is urged, be attended with intrusiveness, harshness, and personal annoyance, and will surely, in the result, fail of even approximate fairness of contribution. The inherent difficulties of assessment, aggravated by the acts of fraud and evasion, will, in a greater or less degree, defeat the purpose of direct taxation. Then let the state levy its contribution on such articles of general consumption as are most easily reached, or on such of the processes of production or exchange as lie most open to view, trusting to the operation of the laws of trade insensibly to distribute the burden over the whole body of the population.

This plea raises the question of the Incidence, the ultimate incidence, of taxation. "I hold it to be true," said Lord Mansfield in his speech on taxing the Colonies, "that a tax laid on any place is like a pebble falling into and making a circle in a lake, till one circle produces and gives motion to another, and the

whole circumference is agitated from the centre." "Taxes uniformly advanced on all like competing property," says Mr. Wells, "will always tend to equate themselves, and will never be a special burden to those who originally made the advances to the government."

This, which may be called the Diffusion-theory of taxation, rests upon the assumption of perfect competition. It is true, to the full extent, only under conditions which secure the complete mobility of all economical agents. As far as any portion of the community are impeded in their resort to their best market by ignorance, poverty, fear, superstition, misapprehension, inertia, just so far is it possible that the burden of taxation may rest where it first falls. It requires an effort on the part of the person who is assessed to shift the burden on to the shoulders of others. Not only is that effort made with varying degrees of ease or difficulty; but the resistance offered may be of any degree of effectiveness, powerful, intelligent, tenacious, or weak, ignorant, spasmodic. The result of the struggle thus provoked will depend on the relative strength of the two parties; and as the two parties are never precisely the same in the case of two taxes, or two forms of the same tax, it must make a difference upon what subjects duties are laid, what is the severity of the imposition, and at what stage of production or exchange the contribution is exacted. It is not, it never can be, a matter of indifference when, where, and how taxes are imposed. "The ability to evade taxation," writes M. Say, "is infinitely varied, according to the form of assessment and the position of each individual in the social system. Nay, more, it varies at different times. There are few things so unsteady and fluctuating as the ratio of the pressure of taxation upon each class, by turns, in the community."

It has always seemed to me strange that Say should be cited, as he so often is, as an authority on the side of the diffusion-theory of taxation. Not only in the paragraph from which I have quoted does he recognize the vital importance of the right "seating" of taxes; but in his references to the essay of Canard, which had been crowned by the Academy, he is even more pronounced. Canard had said that it is of little importance whether a tax press upon one branch of revenue or another,

provided it be of long standing, because every tax in the end affects every class of revenue proportionally, as bleeding in the arm reduces the circulating blood in every portion of the human frame. To this M. Say rejoins that the object taken for comparison has no analogy with taxation. The wealth of society is not a fluid, tending continually to a level. It is, the rather, an organism like a tree or a man, no part of which can be lopped off without permanently disfiguring and crippling the whole.

M. de Parieu has given a chapter of his great work to the Incidence of Taxation. In respect to what he calls taxes levied upon the conditions of every human existence, he reaches the result that they have effects very obscure, and in a still greater degree subject to dispute. Where taxes are levied in cities upon the necessities of life, he finds no considerable danger of evil effects, since there is a constant intercommunication between the laborers of towns and those of rural districts, and migration will soon restore the equilibrium after the disturbance created by the new impost. It is otherwise when a new tax is imposed throughout the whole extent of a country. The emigration of laborers to foreign parts is only accomplished against a certain resistance, arising out of their habitudes and affections. It is always, moreover, accomplished at a definite loss and an indefinite risk. To throw taxes on consumption back upon the capitalist or the employer becomes, in M. de Parieu's judgment, a task very difficult and often wholly impracticable.

I reach the conclusion that, in a condition of imperfect competition, we have no assurance that indirect taxes will be diffused equally over the whole community, leaving each class and each individual in the same relative condition as before the imposition. Something less, it may be much less, than a proportional contribution must result from the differing strength and opportunities of the several classes and individuals. The legislator cannot, then, adopt the comfortable doctrine of the indifference of the place and the person where and on whom the burden shall be laid. His responsibility abides for the ultimate effects of the taxes he imposes. Whether with reference to the equities of contribution or to the general interests of trade and production, he is bound carefully to consider the nature and probable tendencies of every proposed impost.

FRANCIS A. WALKER.

THE PHILOSOPHY OF EDUCATION IN ITS RELATION TO THE SCHOOL AND THE TEACHER.

NOW that the external organization of education has made considerable way in most civilized countries, the minds of men are free to consider the uses to which the machinery is to be applied. The mere acquisition of a certain facility in reading and writing and casting accounts can scarcely be held to justify the present large outlay of wealth and energy. It is only, it seems to us, if education, as essentially an ethical task, is deliberately aimed at that social reformers will find their highest hopes of the school realized. Be this as it may, it is evident that the Philosophy of Education now comes to the front.

I assume that the education of a country is determined by its philosophy ; but I use the word philosophy in the larger sense as denoting the beliefs of a period, whether reasoned out or not, regarding man, his nature, his social relations, and his destiny. Philosophy in the narrower sense as applied to education is, strictly speaking, only psychology, and determines periods of mental growth in the individual and methods of instruction, as these are indicated by a study of the processes of mind. In this sense also the education of a country is determined by its philosophy. The saying of Aristotle that it is not in man's option whether he will philosophize or not, but that he must philosophize, is especially true in the sphere of the school. If this be so, it becomes a matter of no small importance that those concerned with education should deliberately and consciously philosophize, in order that they may define their aims as well as their methods. We hold that a training in philosophy, both in

its larger and narrower sense, is necessary for those members of the community whose special function it is to rear and teach the youth of the country: not for all, it may be, but certainly for the more select portion who influence the general body.

I am well aware that the eminent men who have left their mark on the education of the past have owed their influence mainly to some profound religious or moral impulse. This is true alike of pre-Christian philosopher, Christian pietist, and utilitarian moralist. Nor indeed can any teacher or director of education be held to occupy a place that fits him, if he finds himself discharging the functions of an instructor of youth or a superintendent of schools, unsupported, undirected, and unconsoled in his daily task by a moral or religious purpose. Such a man has missed his vocation. And yet we cannot afford to dispense with the services of many men who lack professional enthusiasm. We cannot afford to close the ranks of the teaching profession against all save those whose true vocation it is. The ministry of the school, like the ministry of the church, must be content often to use weapons of inferior temper. For every three millions of the population we need about five thousand teachers, excluding those in the higher seats of learning and private governesses and tutors. To expect to find so large a number of devout, zealous, sympathetic, child-loving men and women as this, is a fond imagination. All the more difficult is it to command an adequate supply of this class, that the church attracts into its ranks by a prior claim so large a proportion of the men of enthusiastic temper and ideal aims. Luther's dictum, that had he not been a preacher he would have been a teacher, is still the most that any will say. It showed Luther's penetration that he said even so much at a time when the school was so misunderstood and misprized. "I know," he says, "that this work, next to the office of preacher, is the most profitable, the greatest, and the best. Nay, I know not even which is the better of the two. For it is hard to make old dogs tame and old rogues upright; at which task, nevertheless, the preacher's office labors and often labors in vain. For young trees be more easily bent and trained howbeit some should break in the effort. Beloved, count it one of the highest virtues upon earth to educate faithfully the children of others, which so few, and scarcely any,

do by their own." By these words, by his earnest appeals to the civil magistracy to care for the education, not of the few but of the many, and by the share he took in reorganizing schools, Luther connected the education of the young, indissolubly with the aim and method of the Protestant Reformation. Nor were his companions and followers slow to recognize the significance of their master's words. Erasmus, Melancthon, and Knox were full of the enthusiasm of the educator; and John Sturm practically exhibited at his renowned institution in Strasburg what the school could be made, even with the limited materials then at its command. Ideas, however, are slow of transforming themselves into practical facts. The day is probably still distant when the words of Luther will be reversed, and men who feel called to labor for the moral and spiritual good of their fellow-men will say, "If I must relinquish the office of teacher, I would be a preacher;" and yet this is, after all, only the logical conclusion of Luther's own argument. As things actually are, however, it is vain, we repeat, to think that we can recruit the ranks of the teaching profession with men and women who are conscious that they have a "message" to children and youths; and the question accordingly becomes an urgent one, How can we *create* zeal tempered with judgment, judgment moved by zeal? how can the ideal aims and the skilled methods of the few be conveyed into the rank and file of the profession—the multitude of uninspired, but we may presume conscientious, workers who, from various causes, find themselves engaged in the duties of the school-room? Even second-hand inspiration is a great gain to the community. If we could fill all the teachers of our children with a lofty motive and supply them with a sound method of procedure, we should certainly do more to dignify their own lives, and to sustain the moral vigor and soundness of the whole nation through their agency, than by any other means. This is truly a great question—a question for States and for Councils, and one which it is especially incumbent on universities, as the teachers of teachers, to take up.

The thoughtful student of education in its national relations may at once start an objection to the view of the schoolmaster's function we have indicated, in which there is unhappily some truth. He will say that "if education, as distinct from mere in-

struction, be essentially spiritual in its motives and aims, the conflicting views of religious truth and practice that are prevalent make it impossible for any State to give effect to such a conception without trenching on the liberty of individual citizens. The logical issue, in the sphere of practical politics, of such a divided state of opinion is a subversion of education altogether in any true or spiritual sense, and involves the limitation of it to the work of disciplining intelligence and conveying such information as may be of practical utility in the work of life. To this, it is true, may be added such instruction in practical moralities as will rear good citizens: But this is all." Even if we accepted this limited conception of the work of the school, we should still find room for the educational element. But we are not disposed to accept it. It is true that religious differences exist, but they are differences largely ecclesiastical and partly theological. There is little difference of opinion as to what constitutes the Christian life; and it is the life, not the forms of theological dogma, with which the school-teacher has chiefly to do. In the present state of religious parties it seems necessary, in some countries at least, to relegate detailed dogmatic instruction to the churches, or to organizations set on foot and controlled by them. But it is not a sound conclusion from this unhappy necessity that a schoolmaster of truly religious temper is not at liberty even in those countries to *assume* distinctively Christian doctrine, and, by help of this silent assumption, to raise his intellectual and moral teaching into a spiritual sphere. He may animate all he does with the religious principles and aspirations that control his own life, and, thereby, give significance to his daily task. Of this we may be assured, that it is impossible to sustain moral instruction at a high level or to give it its true meaning in relation to the life and destiny of a human being, if it be not fused into one whole with the emotion and passion which can be drawn from the spiritual and religious life alone. Nay, without this spiritual element it may be shown that there is no true discipline, in any adequate sense of that important word. Even the teacher who finds it necessary to confine himself to bald moralities, because having lost his own way he has denied the divine life and taken refuge in agnosticism, has to resort to the "enthusiasm of humanity" as a source of inspiration, if he is to be

more than a mere machine. This itself serves as a kind of religion—spurious it is true, but yet giving forth a certain warmth to sustain the worker, and a light which, tho flickering and unstable, yet serves in some sort to guide his uncertain steps. At best, it is a light that rules the night and borrows all it has of virtue from the true sun that makes the day. Men of this type of mind, however, rarely take to school-work, either in Great Britain or America; nor is it desirable they should. An instructor of youth ought to find himself in substantial accord with the religious life of the people among whom he works. Nor is it often otherwise.

But the spiritual aim is not enough. A certain mold of character is needed. The heaven-born teacher is, like the poet, rare. He must exhibit the authority of law, and this is never arbitrary, but always calm, equable, just. Rigid as maintainer of law, his judgments, and still more his penalties, must yet lean to mercy's side. He must possess that humility of mind which makes him reverence the spirits of children, as purer than his own, and as full of spiritual possibilities, which for himself, it may be, are prematurely foreclosed. He must be endowed with a sympathetic power allied to genius, whereby he may be able daily to be himself a child, to understand the failures and perversities of unformed wills, and the efforts and blunderings of travailing intelligences. His manner must be direct, candid, sincere, and friendly, yet, withal, suggestive of high purpose and unbending law. He must dominate his school as its presiding genius, its spiritual standard, its type of culture; and yet he must be a child among children, a boy among boys, a youth among youths. Where are we to find men in whom opposites are thus reconciled, and whose hearts at the same time are alive with a love of humanity and glow with a religious zeal—men molded by God, as Thomas Fuller says—for a schoolmaster's life? It is because we cannot hope to find them in any large numbers that there is imposed on us the duty of devising some means of bringing young men and women, whose habit of mind or tendency of nature leads them to devote themselves to the education of others, under the guiding influence of older men who can inspire them with the true aims of the educator and the methods by which these can best be attained. Aspirants

of finer temper will quickly perceive under such guidance the truly spiritual task of the teacher ; and the duller minds will, by the exhibition of the philosophy or *rationale* of education, be *intellectually* guided, if not morally inspired, to form an adequate conception of their function in the community. They will go forth furnished with ideals and methods which cannot fail to influence and direct their professional activity. It is in the philosophy of human nature, then, as applied to the growth of mind and body, that we find not merely a scientific basis for the teacher's work, but also a means of evoking and even creating the true spirit of the educator. Philosophy offers him a rationalized conception of the ends and aims of the life of man which carries conviction as reasoned truth. The possession of this, even if there were nothing else, would be a great gain to future schoolmasters. The practical relation of the philosophy he studies and accepts to the subjects, methods, and organization of instruction, and, above all, to the method of moral training, throws the light of science on what would otherwise be at best empirical rules. The instruction of the normal school in methods is good in its place and way, but all empirical methodology, while failing to elevate the teacher, binds him down and makes him a pedant : philosophical methodology, on the other hand, gives him the freedom and liberty of the spirit.

Any other view than that which we here advocate of the schoolmaster's preparation rests on the opinion either that teaching is an instinct or knack and that there is consequently neither a science nor a teachable method of education ; or that the schoolmaster's duty is one of instruction only, and that the acquisition of good methods of instruction is a sufficient, and the only practicable, preparation. The former opinion we may in these days pass by. The latter is bound up with the larger question of a schoolmaster's vocation. But even assuming that a knowledge of methods of instruction is an adequate preparation, it is easy to show that these must be wooden and inflexible if they rest on empiricism, or are dogmatically taught, and that they are incapable of being rationalized save on the assumption of a definite philosophy of mind. Philosophy tests and checks, while it explains methods, and thus raises the teacher out of the ruts of traditionalism and the " customs of the trade." It

transforms him, indeed, from a tradesman into the member of a profession, and nothing else can do so. If to his philosophical understanding of method he adds that higher view of his calling which entitles him to the name of educator, and endeavors to widen his philosophy so as to cover this larger sphere, the public voice will assign him his true place in the social system ; and that will be a place that will satisfy every legitimate ambition. He will be measured by his own standard of his own work. We demur to the opinion that because a master is departmental only, as must generally be the case in high-schools, his sphere is limited by the subjects in which he instructs. To the head-master doubtless specially belongs the general discipline and educative character of the school ; but he will be powerless unless each of his departmental assistants understand his disciplinary aim and assist him in giving effect to it. This thorough accord between heads and assistants will certainly be secured when each has studied the philosophy of his art and so found common ground of action, and does not, as now, accept what are merely arbitrary and capricious customs and rules that do not affiliate themselves to sound and rationalized methods.

The hardness and self-complacency that characterize the men whose arbitrary caprice or inherited dogmatism determines what they shall do and how they shall do it, has given us the "domine" of tradition, and has served to perpetuate the feeling that schoolmaster and slave are still, as in Roman times, interchangeable terms. We venture to affirm that it is very seldom that a man of cultivation cares to sustain a conversation with a thorough schoolmaster even in these our days, unless the latter happen to be a man whose original researches or literary occupations have made him something more than a mere schoolmaster. Nothing can change this, we are convinced, save the clear acceptance, by the whole body of schoolmasters, of education and not mere instruction as their function, and such a philosophic study of their subject as will justify them in making so high a claim. The whole race of masters in the public schools of England have risen in social estimation since Arnold of Rugby's time. And this not alone by the reflection on the whole body of the glory of Arnold, but because they have largely, through the Rugby influence, been animated by a deeper moral spirit in their work. When they

advance still further, and, in a spirit of reality, accept the whole *education* of the boy as their task, and seek to enlighten their methods with a philosophy which interprets the word education for them, their position will be second to that of no profession. The ablest minds may then, perchance, be attracted to a work so potent in its influence on the destinies of their country. We do not desire to create mere enthusiasts. Undirected and uncontrolled enthusiasm burns out, and leaves only ashes behind. The genuine enthusiast subjects himself to law if his work is to be effective and permanent. The fierce heat of the sun itself attains its ends in the domain of nature by working according to the law of each kind. Where it does not do this, it destroys. So with the fire of the educational enthusiast. We desire to see the ardor of the youthful schoolmaster so founded on principle and controlled by intellectual purpose that it will last a lifetime; and this is possible only by timely subjection to the order and law which philosophy alone can give.

To the question, How comes it that a subject so important in its bearings on the well-being of the State has received such tardy recognition? the answer is easy. If the duty of educating the masses of the people has been of such slow growth as to have taken practical shape in a country such as England only within the last few years, we can scarcely be surprised that the philosophy of education has still to struggle for a place. State necessities must long forerun state ideals. The recent institution of chairs of the Institutes and History of education in the Scottish universities of Edinburgh and St. Andrews, altho the work of private hands, indicates an acceptance by these seats of learning of the duty they owe to the education of the people, which must ere long influence other universities, and through them the statesmen who guide national education both in England and America. Already the question has been under the consideration of the ancient University of Oxford, while at Cambridge the founding of a lectureship, which will ere long, we hope, become a professorship, has been already resolved upon.

While the primary education of the people was in arrear it was inevitable that the philosophy of education should stand still. It is only when the machinery of a nation's education has

been set up that the question of the best application of that machinery presses. Again, it is in the primary school that educational aim and method most distinctly force themselves on our attention. It is chiefly in the initiation of the human mind to knowledge, and in the formation of the still plastic character of childhood, that questions of aim and method suggest themselves for solution. When solved in this sphere they are solved, also for the higher stages of secondary and university instruction. The upper schools of a country will be insensibly molded by the aims and methods of the people's schools, and are already being so molded.

Another obstacle in the way of the recognition of the philosophy of education as a subject within the range of practical politics has been the backward state of the science of psychology. That we may bring into view the connection subsisting between psychology and solid advances in education, let us survey briefly the history of the past. The crude and generalized psychology of ancient Greece was boldly applied by Xenophon, Plato, and Aristotle to education. They regarded this subject as a vital part of political philosophy, and they applied their psychology, such as it was, with brilliant success. But their views on education, admirable as they are, are necessarily restricted by their psychology, and by their conception of the aim and destiny of man and of the State. Plato's *Republic*, while containing his most matured views on philosophical questions and on the idea of a state, is also a treatise on education. It is not, however, a treatise on method, but rather on the general aims of education in which the Doric and Ionic ideas are woven together into a unity by philosophy. For four centuries the opinions of Plato and Aristotle on education governed the civilized world, and it was not till the eminent Roman teacher Quintilian recorded his experience and practice that any marked step in advance was taken. Quintilian's book is in marked contrast to Plato's. It is not a philosophical speculation, but rather a treatise on method from the hand of a practical schoolmaster. As the first book on method, it marks an epoch. When education passed into the hands of the Christian Church, instruction in the new doctrine of our Saviour and his apostles became naturally the main end. The individual had now an infinite value in himself

as an immortal spirit, and the natural consequence of this novel thought would probably have been a great movement in the interests of popular education had the state of society admitted of it. The methods of instruction practised in the monastery schools for a thousand years degenerated grievously because there was no philosophy. We cannot imagine that this would have happened had the institutions of Quintilian not been, during all that period, lost. It was only at the time of the Reformation that an interest in methods of instruction began again to show itself among the Jesuits on the one hand and the Reformers on the other. Even the indifferent and sceptical mind of Montaigne saw that the "greatest and most important problem of human science was the rearing and education of children." But the attention which the Reformers directed to educational method was soon relaxed, notwithstanding the labors of Melancthon, Dean Colet, Roger Ascham, and Sturm. Roger Ascham's "Scholemaster," written in the time of Elizabeth, had not effected much, admirable as it was as a school guide and as a specimen of literary execution. It was not a philosophical treatise, but, like Quintilian's *Institutions*, a book on method only. It was the application of vigorous English common-sense to the work which the teacher had to do; and allowing for some defects and for occasional exaggeration and over-sanguineness of expectation, it still remains a book which is full of instruction for the modern teacher of language. Yet the English pedagogic world was content to drop it out of mind, and to go on by "rule of thumb," suicidally proclaiming that their work was neither a science nor an art, and that they themselves consequently were only boy-drivers and dominies. With the Baconian movement came a new interest in psychology, and education began to ally itself with philosophy.

The man who in 1604 gave expression to the commonly felt need of educational reform was Wolfgang Ratich, a native of Holstein, and the impulse which he gave we still feel. The views that he advocated, while suggested by a deep consideration of the need of education for the whole people, and the consequent necessity of finding a universal method, were the fruit of a reaction against the domination of words over things, and may easily be traced to the influence of Bacon and the "Novum

Organon." As knowledge of things was now, in the opinion of educational reformers, to take the place of a knowledge of words, and as the new philosophy taught that it was by induction only that we could interpret nature, the watchwords of Ratich and his followers were, " *Omnia per inductionem et experimentum,*" and again, " *Vetustas cessit; Ratio vicit.*" After the fashion of enthusiasts, Ratich prosecuted his objects by worrying all in authority, and finally succeeded in getting his scheme remitted by the German Diet to certain professors in Giessen and Jena, to be reported on by them. The words they used in submitting their report are worth quoting, as containing the first authoritative statement known to us of the close connection that subsists between psychology and education. " *It is not enough,*" they say, " *that a man should carry on the work of instructor according to his own fancy and opinion of what is right, or in dependence on his native discretion and natural ability; but to this work there belongs a special art, viz., the art of instruction, which no less than other arts has its fixed grounds and assured rules; and these arise not only out of the understanding, memory, sense, yea, out of the whole nature of man, but also out of the characteristics of languages, arts, and sciences.*" When Ratich began his educational mission, the internal state of schools seems to have been little better than when Melancthon and Sturm effected such great improvements. There had been a relapse. Latin (with here and there a little Greek and arithmetic) was the sole instrument of instruction; and even this was badly taught. Dreary generalizations of language rules, covering the whole field of grammar, including even exceptions, and all these written in barbarous Latinity, had to be learned by heart by the unhappy pupils. This, with the reading of Latin authors, with little regard to the order of reading, and with no attempt even at the historical instruction which ought to have accompanied the reading of these authors, constituted the school curriculum. The literary humanistic culture which now mainly sustains Latin in its time-honored place in the school does not seem to have been thought of. The wave of the Renaissance seems to have exhausted itself. We do not propose to enter fully into the Ratichian system, but as it was the first modern attempt at once to philosophize on the

subject of education and to furnish a practical method, it is worth our while to summarize his leading positions. These were: 1. Every thing according to the order and course of nature: for all teaching and learning which is contrary to nature and violent, is hurtful, and weakens nature. 2. Not more than one thing at a time; for nothing is more obstructive to the progress of the understanding than learning many things together and at the same time. Therefore treat one thing thoroughly and then go on to another. Every language may be learned out of one author. 3. Repeat one thing often; for what is often repeated is imprinted on the understanding deeply and thoroughly. Many things crossing one another confuse and overload the understanding. Here Ratich borrowed the Jesuit maxim, *Repetitio mater studiorum*. 4. Every thing in the mother tongue first. The advantage of this is, that the young learner has to think only of the things which he has to learn. 5. Every thing without coercion; for through compulsion and blows we disgust youth with studies, so that they put themselves in an attitude of hostility towards them. It is also against nature. The pupil should not be afraid of the master, but love him and hold him in honor; and that happens if the master rightly discharges his office. 6. Nothing shall be learned by heart; for much learning by heart detracts from the intelligence and acuteness. If a thing, being understood, is imprinted on the mind by frequent repetition, memory follows of its own accord. 7. Uniformity in all things, as well in what concerns the learning of an art as in the books used and the rules to be acquired. The grammars of the various languages should be as much alike as the differences of the languages admit of. 8. First, a thing in itself, and then the *way* of a thing. No rules till one has given the matter of the author and of the language. Rules without the materials on which the rules are based confuse the understanding. 9. " *Omnia per inductionem et experimentum.*" Without subscribing to all these canons, we yet recognize in them the outline of a complete scheme of method; and we may find in them, moreover, the germ of all succeeding attempts to methodize the art of instruction. The defects of the Ratichian system consist in its too purely intellectual character, and in the shallowness of its philosophic basis. But he did not wholly neg-

lect the educational, as distinct from the instructional, part of his subject. His innovations in the matter of discipline, indeed, tho somewhat whimsical, were in the right direction. To attract to learning rather than to coerce, was his aim ; and he was so anxious to preserve the purity of the intellectual and moral relation between master and scholar, that one of his plans was to leave the discipline (in the sense of coercion) in the hands of a separate authority, whom he named the scholarch. The misery to which young humanity was in those days subject, and which seemed to be accepted as a necessary accompaniment of all learning, may be learned from many authorities, who confirm the words of Balthasar Schupp, written when Ratich was approaching the end of his disappointed career. "I must confess," says Schupp, "that owing to the vexations, diffuseness, and intricacy, and the scholastic tyranny which prevails in our schools, many a fine spirit is deterred from study. The ancient Latins named a school *Ludus*; many school-masters have, however, made it a *carnificina*, or place of torture. If one should perchance pass by a place where such a scholastic tyrant rules, *ubi plus nocet quam docet*, one may hear a pitiful howling and lamentation, as if Phalaris himself held his court there, and as if it were a den of the Furies rather than of the liberal arts. If I had a dog which I loved I would not hand him over to these beasts, much less a son."

Passing from Ratich, who may be held to represent in the field of education the new school of philosophy inaugurated by Bacon, we find the philosophy and method of education next taken up by his immediate successor Comenius. The tractate of John Milton, published soon after the appearance of the first works of Comenius, did not aim at expounding a philosophy or method of education, but rather at laying down the subjects and order of instruction ; and notwithstanding many exquisite passages, it contributed, we should think, very little to the progress of thought on the subject. Amos Comenius, the pious bishop of the Moravians, inherited the ideas of Ratich (altho the precise extent of his indebtedness is uncertain), but being a man of more systematic mind he was not content with them as they stood. He had pre-eminently an organizing intellect, and the result of his labors was the production of a

work which we believe to have been the first attempt to work out the whole methodology of education on the basis of a definite scheme of philosophy. This philosophy was of an eclectic character, and while resting on Christian theology, borrowed not a little from Plato and Aristotle. The leading idea of his system, as indeed it must be the leading idea of all educational method, is that we ought to proceed according to nature. In his principal treatise, published in 1627, he begins dogmatically *ab ovo* by laying down certain propositions regarding man, from which he instantly proceeds to make deductions. His first proposition, for example, is that man is the last, most complete, and the most excellent of living creatures. His second proposition is that the final end of man lies beyond this life; and here he points out that man's life is threefold—vegetable, animal, and intellectual or spiritual. The first nowhere manifests itself outside the body, the second stretches forth to objects through the operation of the senses, the third is able to exist separately as well as in the body. The third general proposition is that life is only a preparation for an eternal life; the visible world is a seed-plot, a boarding-house and a training-school for man. The fourth proposition is that there are three steps of preparation for eternity: to know one's self and all things, to have power over all things and one's self, and to refer all things to God, the source of all. These requirements are summed up in the words *Eruditio, Virtus, and Religio*. The seeds of all these are in us by nature, and the object of education is to develop them. How is this to be done? By recognizing a law and order in man's growth, as in the realm of nature. Let us, then, find the law and order of nature, and we shall find the law, order, and method of education. Proceeding on this track, Comenius lays down a large number of general principles of nature, which he at once transfers to the sphere of education, deducing from them rules of method. Moral and religious instruction, questions of school-management and of school-organization, are all considered in detail from the same point of view. It is scarcely necessary to say that the attempt to carry out a parallelism of process in the operations of nature and in the educating of a mind fails in the hands of Comenius, and leads to a forcing of the argument, and to the propounding

of analogies which are not true analogies. This straining of parallelism, while it vitiates the argument as a logical whole, is yet fruitful of many suggestions. It does not always fail. The practical outcome of his philosophic treatment is indeed almost always good. There is scarcely a method in teaching or a device in class-management in the present day accepted as final which may not be found in Comenius.

Like Ratich, Comenius warred against the mere word-teaching of his time. "Id agendum est," says Seneca, "ut non verbis serviamus sed sensibus." The scholastic maxim, "Nihil est in intellectu nisi quod prius in sensu," was accepted by him as absolute in the school. His great aim was to teach about *things*—all things in heaven and earth—through language, and language again by the *presentation to the mind of all things*.

In moral instruction Comenius gives thirteen canons, and he has a most instructive chapter on the teaching of religion. In all these things he was far ahead not only of his own, but even of the present, time. His philosophical system yielded him thoughts on the organization of schools as well as of the instruction to be given in them. He was the first to conceive the idea of the infant school under the name of the "mother-school;" and his gradation of schools was so well devised, that, with very slight modifications, it now constitutes the German State system.

The merits of Comenius are mainly due to the fruitfulness of his philosophical system, inadequate as it was; and if we are to mark his defects, it is to his philosophy also we must look as the source and explanation of these. Like many men of his time, he was under the commanding influence of the Baconian Induction, which had directed the attention of men away from grammatical niceties and scholastic subtleties, to the external realities of nature. He was consequently a Realist in education. When he came to deal with method he had not the full advantage of the inductive method as applied to psychology. Inductive psychology, indeed, was in its infancy. He, like many others then and now, was driven by a strong feeling of reaction against word-teaching and logical subtleties, to a belief in the omnipotence of a knowledge of the realities of nature and man to reform the human race. Such expectations could lead only

to disappointment. Discipline of intelligence simply as discipline, and discipline of will in the moral sphere, were alike subordinated to mere information. Even in the moral sphere, to which Comenius gave more prominence than it has since received, mere instruction was to accomplish all or almost all. Notwithstanding these defects, we find in the writings of this remarkable man the germ of all succeeding educational reform.

We have dwelt thus long on Ratich and Comenius, that we may show the close connection that subsists between education and the philosophy of mind. The art of education rests on the methodology, and the methodology of education, again, rests on psychology, while psychology is only a part of our larger philosophy of man. A system may be thus elaborated ; and it is from systematized and thoroughgoing elaborations that we learn most, even when we find it necessary to set aside the system itself as radically defective. The whole history of philosophy is an illustration of this. And it is not surprising that it should be so ; for the moment a man imposes on himself the work of systematizing his reasoned convictions he is driven of necessity to find for them some broad and solid foundation ; and, working inductively and deductively, to fit his thought into a connected and logical whole. This effort serves as a test of his doctrine applied by himself before it is exposed to the criticism of other minds.

We have had many excellent essays on education since Comenius' time, of which the most important is that of John Locke ; many schemes of educational organization ; many social treatises on the philosophy of education, such as those of Rousseau and Pestalozzi ; many elaborate applications of the German philosophical systems of Kant, Herbart, Hegel, and Beneke, to the subject of education in general ; many treatises on methods, more especially those called into existence by the normal schools of America, Germany, France, and Great Britain ; but we have had only partial attempts to lay a psychological foundation for education, and to deduce from this, aided by the experiential inductions provided by the actual work of a school, a reasoned and coherent system of methodology and school practice. That we shall have such attempts in the future as our knowledge of mind, and of the physiology or

material basis of mind, extends, we have no doubt. The conviction will gradually force itself on men's minds, that in the training of a great profession it is only by a well-conceived scientific preparation that we can give method and law to educational genius, while we supply the lack of genius in that large proportion of aspirants who seek to enter the profession, from honorable motives certainly, but without any strong educational impulse.

Locke's tendencies are all realistic and utilitarian. And it is a remarkable fact that it is this realistic impulse, if we may so name it, which has given us our best and ablest works on education in England and France. Passing over numerous books of great practical value but of unambitious aim and touching only parts of the field, we do not reach an English writer on education of philosophical rank and aim till we come to Mr. Herbert Spencer—himself also a realist, who affects to deal with the whole range of the science. He puts before us in a rational form, frequently commanding our hearty assent, the position of the "modern" school who advocate instruction in realities as of supreme importance. Even the opponent of Mr. Spencer must be thankful to him for it—not merely because of the lucid logic of his reasoning, but for a philosophic statement which, merely because it is philosophic, minimizes the distance between the utilitarian school and its opponents. This is a matter of great importance, because if the education of a country is to be properly organized it is desirable that a mutual understanding should be arrived at by different schools of thought.

If we wish to see how the philosophy of education may influence for better or worse the whole life of a nation, we have only to read Mr. Spencer's book. He tells us that the aim of all sound education is to train to "the right ruling of conduct in all directions and in all circumstances," and is an answer to the question, "How to live?" He then proceeds to indicate a system of instruction which shall bring youth into an intelligent practical relation with the world in which they have to work. The error here is that which we have found in preceding realists, notably Comenius, viz., that it is by instruction or information that we educate. It is true that when Mr. Spencer

comes to deal with method he insists on instruction being determined in its successive stages by the laws of the normal evolution of intelligence, if it is to be effectual for its end ; but still it is instruction and the order of instruction which is the governing idea of his philosophy of education. Not that the discipline of intellect is altogether ignored by him. On the contrary, his chapter on Intellectual Education is one of the most valuable in his book. But even here it is not discipline in the best acceptation of that word, but the development of intelligence as based on a training of the senses and proceeding therefrom in orderly evolution, that he urges on his reader. We believe that every thoughtful educationalist will accept Mr. Spencer's reasonings so far as they go. Idealists and realists must meet here. The intelligence proceeds inductively in acquiring knowledge, and the teacher, if he be truly an educator, must initiate into all knowledge also inductively. The universal canons are : "From the Concrete to the Abstract," "From the Particular to the General." But this having been done, what then ? The intelligence, by moving in accordance with its laws, is certainly, we freely admit, trained ; but is it, in the true acceptation of the term, *disciplined* ? This throws us back on the further question, What do we mean by the discipline of intelligence ; and when we have disciplined it what have we gained ? Is the game worth the candle ? Such questions belong to the philosophy of education, and they are not idle questions. On the answer depend the subjects taught in our schools, the aim of instruction, the organization of instruction, and the methods of instruction. The philosophy of Herbert Spencer, and we may add of all empiricists, offers us no adequate solution of the question—is indeed, if consistent, incapable of doing so. In moral education Mr. Spencer's chapter is full of wisdom, and suggests even more than it directly inculcates. His two leading principles—that the educator's object is to rear a self-governing human being and not a being to be governed by others, and that punishment should be the natural consequences of acts—are, so far as they go, sound. But as constituting the whole moral aim of education, this, to our thinking, is very defective, while the penalty suggested is adequate to the guidance of boyhood and youth only within very narrow limits.

As water cannot rise higher than the level of its source, so an educational theory in the actual education of a country cannot rise higher than the philosophy from which it emanates. We hold that man is a being who seeks after ideals both in the intellectual and in the moral world ; that the ideals of holiness, purity, integrity, self-sacrifice, are to be set up before the boy and youth, and that our teaching must promote the growth of these ideals. Wherein consists the inner penalty of a failure in purity or integrity if these virtues are to be degraded to the position of being the product of a mere correlation of the individual and his wants with external conditions—a correlation so adjusted as to secure the most and the best ? It is impossible, it seems to us, that an educational system that looks no higher than this of utilitarianism can furnish a motive to the teacher or elevate the human race. The boy, the youth, and the man must have a type of excellence after which they strive—ideas in which to live, and, above all, an ideal to contemplate higher than any that mere prudential morality can furnish. A perfect type of mere prudential morality would, in point of fact, be necessarily an insufferable prig and pedant. Our moral ideal must have in it the elements of infinitude that it may call forth an infinite striving, and the characteristics of the perfectly beautiful that it may draw us by the cords of love. This we have in Christ, in whom we see the ideal man, the mere contemplation of whom turns us to his image.

We have said that the educational theory of Mr. Spencer (and we cite him as representative of an influential school) is inadequate in the aim it proposes to itself, both in the intellectual and moral sphere, and consequently also in its methods. We say inadequate, for, so far as they extend, the aims and method are, speaking generally, to be accepted. Education ceases to be a work of surpassing importance if its aim be not the highest possible for man ; and the educator who abnegates ideals and the spiritual life thereby places himself on a level lower than that on which we should wish to find him. The depression of his aim depresses likewise the methods to be pursued, and his whole function and position in the social system. The animating forces of his own individual life must also be the aims of his professional activity in the school. His ideal for

others, he may rest assured, cannot rise above his ideal for himself.

If we do not accord to man something more than a power of reacting against external impressions and co-ordinating these by virtue of association, we miss the true meaning of his existence. The central force which we call *Ego*, and of which the essential and connate characteristic is *Will*, seeks to connect itself with limitless aims and eternal ideas. It will be satisfied with nothing less. Contemplating steadily man as distinctively and *par éminence* a living will among the forces of nature, self-conscious by virtue of that will, and striving instinctively to find God as the end as well as fountain of his being, we are at once supplied with a most fruitful principle. We are furnished with aims and methods of education which, while embracing the whole sphere of knowledge and mere prudential activity claimed by the pro-pounder of a less adequate conception of man's life and destiny, stretch into regions which are of necessity and by his own showing an unknown and unknowable world to the sensationalist. Let us consider for a moment how the view of the philosophy of man that we have indicated affects the education we seek to give to the young, that we may exemplify still further the close connection that subsists between a nation's philosophy and its educational aims and methods. If man be pre-eminently a will; if it be a capable and completely fashioned will that we as educators desire to help each of our pupils to realize for himself; if year by year our object is to aid this pure spiritual force to rise above the environment of nature and be truly *itself*, our educational task is at once defined for us. Will, as spiritual force and supremacy over nature (which term of course includes the appetites and desires of our human nature), must in the sphere of intelligence be disciplined with a view to its easy and ready application to objects of knowledge and to the affairs of life. Discrimination, discernment, sustained power of self-application—these are the qualities of intelligence which we must foster. From the purely practical point of view, is it not the fact that these are the characteristics by which one man excels another in the business of life? Discipline then is, according to our conception of the philosophy of man, our chief intellectual end as educators. But this discipline of the will which,

as the specific characteristic of man, is the basis of intelligence, is not enough if we regard it merely as pure spiritual force ; it moves, in accordance with certain laws, to the acquisition of knowledge, and to the discrimination of the true and right among the complex materials of our daily life. These laws are sufficiently indicated in the ordinary psychological logic of induction and deduction. We must then in the subjects we teach, and, above all, in our method of teaching, work the intelligence in the line of these laws. This may be called training, as distinct from disciplining, tho it is manifestly difficult to introduce a distinction here. Mere force will not carry mind to its aim ; it proceeds by a way which way is method. The material which we give for this will and method to work in, is a matter of great importance doubtless, but the consideration of this must always be governed by the higher object of all education, which is training and discipline. Starting from this point, we have to consider the material in which each and all of us have to work—the environment of our lives provided for us in the divine order, and to which we must loyally conform. It seems to us that there ought to be little difficulty in determining the subjects of instruction and the order of instruction, if we allow the question of discipline and method to dominate the question of the materials of school-work.

In the moral sphere, Will again stands pre-eminent. It is this that we have to cultivate. In the religious sphere we have, following at once Aristotle and the Christian doctrine, to direct the will and to fix it in the contemplation of the divine. It can find satisfaction for its restless activity only in spiritual ideas and in God. Comparatively little value is to be attached by the educator to moral instruction, save in so far as it is directed and inspired by religion. It is this marriage of the moral and the spiritual that produces what may be denoted by one name—the ethical life. The discipline of the will in mere understanding and knowing contributes also its share to true ethical discipline. The unity of educational result may be in truth summed up in the single word, ethical. Our aim in the school, therefore, is an ethical aim, and all we do is of true value only in so far as it contributes to this—the final cause of all our teaching. By keeping this purpose steadily in view, we alone

truly educate a human being. Unity of purpose and method, both in the intellectual and moral sphere, is thereby secured. It is some such unity of purpose and method which the study of the philosophy of education must give if it is to supply the place of native inspiration to the teacher.

We are aware that the elements of mental science are already taught in some normal schools in England and America. We should desire to see this subject included in the curriculum of every normal school. But even then the philosophy of education in any adequate sense would not be taught. It is only by connecting this subject closely with the philosophical faculty in all our universities, where students are being carried through a higher course of instruction than is practicable at normal schools, that it can receive thorough scientific and historical treatment. It is true that only a small proportion of the teachers of a country, and those chiefly high-school teachers, would even in that event come under the influence of philosophy; for only a small proportion have the qualifications necessary for a university career and can find the necessary time to prosecute it. But it is with this subject as with all others. The fact that it is cultivated in the universities would gain for it respect and attention outside the university walls. The few who, after a course in the philosophy of education, might go forth as educators would carry with them an influence that would extend to every corner of the profession. The entire body of teachers would affiliate themselves in spirit to the universities, and seek guidance thence. United by the bond not merely of a common occupation but of a common professional standard of aim and work, the university and the humblest infant-school would join hands. The teaching body thus bound together would become a national institution, in the sense in which the church was, and in Great Britain still is, an institution; an institution, moreover, of great power and importance, because broader in its conception and aims than the church, and commanding, in these days at least, more universal sympathy. The schoolmaster would then take rank with the professions, which at present he can scarcely be said to do, either in England or America. In this new republican hierarchy (if we may conjoin almost contradictory terms) the civil power would find its best friend and

its surest guarantee of law, order, and stability. It is mainly, indeed, in the hope of aiding in the organization of a new institution which shall contribute to order and civilization in the midst of the disorganizing forces by which society is surrounded that we advocate a scientific basis of training for the teacher. And as to the teacher himself, he can hope to hold the social position which he desires, only when he is a recognized social influence and is a member of a compact organization which stands prominently before the public as an independent profession. In the philosophy and history of education alone can the members of the craft find a common ground of genuine intellectual professional life and a true and worthy union of interests and aims which will take the place of those personal interests which to a large extent constitute the basis of their present combinations.

S. S. LAURIE.

DEVELOPMENT AND GROWTH OF CONSCIENCE.

THE burning philosophic question of the day relates to the development of conscience. It divides itself into two: Is the conscience developed? If it be, does this interfere with its authority?

I. Is the conscience developed? If so, out of what? Out of the original elements, whatever they be, of which matter is composed? Out of atoms or molecules, or out of centres of mechanical power, or out of monads (of Leibnitz)? There is no evidence whatever that any of these can produce moral perception. It may surely be assumed that a cause cannot communicate what it has not. There is no proof that any agglomeration of matter, say clay or ice or gold, or liquid or vapor can bring forth a thought or a sentiment or a volition. I believe it will be admitted that there is no moral discernment in the original atom or molecule or force centre, and I do not see how any of these can give what it has not itself got. They assure us that it comes in, they cannot tell how, by a combination of the original bodies or forces and goes down by heredity. It may be allowed that heredity might hand it down if it once had it; but if it has not got it, it cannot transmit it. Observation makes known no instance of an action of material particles being able to give birth to the judgment and the sentiment which discern between good and evil, and which tell us that it is wrong to tell a lie and to act the hypocrite.

It may be allowed, however, that if once we have or had a moral germ, it might be propagated. Nobody imagines that material particles could spring up of themselves, but being created they work in certain ways by the powers they possess. Darwin allows, or rather demands, four or five germs created by

God before he can account for the development of animals. We continually observe the infant weak bodily and intellectually growing up into the strong man. So if we once had conscience as a germ, we might conceive it growing and expanding.

II. Supposing that there is evolution in conscience, the momentous question presses itself on us, Is its authority, and in particular its supremacy, thereby dethroned? Ethical writers in ancient and modern times have been in the way of appealing to its decisions as infallible. It is now urged that it is the product of circumstances, that its decisions are different in different circumstances, and that it varies from age to age.

As to whether development interferes with the authority of conscience, this depends on the nature of the development. If the evolution is fortuitous or fatal, we might not be entitled to argue that the product carries with it any weight. Thus circumstances often generate prepossessions and prejudices, those of individuals and classes, say of soldiers or tradesmen or lawyers or ministers of religion, which so far from being justifiable are to be condemned. So it might be with a conscience evolved out of blind matter and positions. Hereditary convictions, so far from being always good, are often immoral and degrading: as for example heathen superstitions, family, tribal, and national antipathies. There are cases in which conscience seems to sanction weak and injurious customs, such as the abstaining from food which is nutritious, and requires harsh sacrifices in the lacerating of the body and waging destructive wars against nations and creeds.

But there may be cases in which there is development and yet authority. We assume here that there is a conscience; no man admits this more fully than Herbert Spencer. We assume farther, that conscience in man claims authority. This conscience declares that we ought to love others. This sense of *ought* and *obligation* may have been handed down from father and mother to son and daughter, and from one generation to another. But surely this circumstance cannot render its claims invalid.

It is now seen by a great many people capable of thinking, and is fully acknowledged by Prof. Huxley, that development does not interfere with teleology or the argument from design in favor of the divine existence. Herbert Spencer has shown

in his "Data of Ethics" (see a review of that work in this REVIEW for November, 1879) that development in the geological ages makes for ever-increasing happiness by widening the field of enjoyment as living creatures rise in the scale, and this law and tendency certainly look as if the process was ordained by a being of benevolence. It can easily be shown, that the evolution of plants and animals from one another contains evidences of ends and purpose in the promotion of the comforts of animated beings. Sooner or later there will be a work written after the manner of Paley, showing that there are proofs of design in the very way in which by a long process the organs of the body have been formed and made to fit into each other. All this proves that evolution is a law of God quite as much as gravitation or chemical affinity or vital assimilation. Suppose that, as the result of development, we have a conscience which points to a moral law which is of the nature of a categorical imperative, requiring this and forbidding that and pointing to a designing God, guaranteeing the whole: we are justified in regarding this law as carrying with it the sanction of God, and authoritative. It is admitted that on the supposition that individual men were created by God with this law in their hearts, this law has claims on their obedience. But these claims are not cancelled by its being shown that the conscience in the living man is the result of a process all under the control of God, and evidently tending to the production not only of happiness but of moral good.

Put the farther supposition that in the development there has been a germ of some kind there at the beginning or super-induced at a certain stage, we have a hypothesis worthy of consideration and in no way derogating from the authority of God or the moral power. That germinal power according to the supposition has been there all along, and comes forth into action in certain circumstances, and is liable to be strengthened or weakened or modified by the surroundings. Regarding God as having produced the original germ and guiding and guarding the evolution of it, we may surely regard the conscience as possessing not only original but hereditary authority, as the vicegerent of God, and speaking to us in the name of him who has been our Maker and is our Governor and is to be our Judge.

The question of the validity of the conscience is quite anal-

ogous to that of the validity of the intelligence. It is certain, I think, that there has been an evolution and growth of man's intellectual powers. But this does not lead us to set aside or distrust our power of discovering truth. The intelligence is a cognitive power, and it perceives things and the relations of things without and within us. It grows with our growth, and is ever revealing more truth. The man knows more than the child, the civilized man more than the savage, the philosopher than the peasant; and this circumstance does not lead any man to distrust his understanding—does not lead him, for example, to doubt mathematical truth or the ordinary observations of experience. Just as little should the growth of the moral power lead us to doubt of its authority. The two are on precisely the same footing. If the one is to be trusted in discerning what is true and what is false, so is the other to be trusted in discerning between good and evil. If the power of knowing the good is to be denied or set aside, we must, on the same ground, give up the power of discovering truth and sink into scepticism, or at least agnosticism.

The conscience grows as all living things do. But it grows from a germ. The faculties of the mind are all, like the laws of nature and the properties of matter, of the nature of *tendencies*. Sense-perception is such a tendency. It does not act till it is called forth, and it is called forth by material objects presented to it. It is much the same with all other mental capacities. The judgment acts when objects admitting of comparison are brought under its notice. The fancy is a seed, but does not flower or bear fruit till it has experience and knowledge as its material and its nutriment. There are intellectual germs in infants and in savages, but they need to be ripened by light and heat falling on them. It is the same with the moral power; it is in all men native and necessary, but it is a norm requiring to be evolved.

It grows as the tree grows. As the oak needs soil in which to root itself and air of which to breathe, so the conscience is in our psychical nature, and is in contact with stimuli to make it germinate and expand. All along it is so far swayed by its surroundings. Its health depends so far on climate. When reared in a bare soil it will be dwarfish. When exposed to cold and

blighting it will be stunted and gnarled. In a good soil and a healthy atmosphere it will be upright and well formed. In particular, it grows and spreads out with the intelligence which enables it clearly to apprehend the realities of things, to discover causes and calculate consequences. All this is in accordance with what we observe of human nature, and may be fully admitted, while we hold that the moral capacity and perception could not have been produced without a native moral norm any more than a plant could have grown without a germ.

From this account we see how the conscience is liable to be deceived and led astray. In particular, it may be influenced by the desires and wishes of the heart or will. It is, as Butler often calls it, "a faculty of reflection," and does not perceive objects directly as the senses and the consciousness do. It is dependent on the representation given it of the state of the case. If that be perverted, the judgment of conscience, right enough in regard to the picture given it, may be wrong as to the fact. On the supposition that the white thing we see in the wood is a ghost we might very properly be alarmed, but we have no fear when we know it to be a sheet of linen. If that idol is a god, as the man's ancestors told him, he does right to worship it and submit to the sacrifices it requires; but if, as the Christian knows, it is no god, he feels under no obligation to yield it reverence or obedience. If this farm is mine, as the Irish peasant believes, he is justified in resisting all attempts to drive him from it. He will see this to be wrong when convinced that the property belongs to his landlord. Parents made their children to pass through the fire to Moloch, because they were convinced that the act would pacify their god. A friend of mine who was under the delusion that God required him to sacrifice the object that was dearest to him, and endeavored to put his wife, as the dearest object, to death, had a correct enough moral sense, but was under the sway of a deranged understanding. Saul thought he did right to crush the rising Christian sect, because he regarded them as apostates; but he changed his conduct when he saw that they were following the true faith. The Hindoo mother casts her female child into the Ganges and the African exposes his mother to death by the fountain, because they have the idea pressed upon them that it is better they

should thus die than be exposed to a life of hunger and privation. The Jesuit regards himself as justified in deceiving the enemies of the church, because of the good thereby accomplished, and does evil that good may come.

But with all its defects in our weak and corrupt nature, the conscience is indestructible quite as much as the understanding is. In children and in savages it has to occupy itself with insignificant matters; but it is seen working, and it is capable of being developed by an increase of intelligence. Criminals have resisted and so blunted it; but at times it will deal its blows upon them with tremendous force. Deceived and silent as to certain deeds of wickedness, it will show itself alive and awake as to others. We have heard of robbers committing murder with little or no remorse, but greatly distressed by the neglect of certain superstitious rites which they regard as binding on them. On the other hand, there are persons upright in their transactions with one another, but who do not seem humbled or distressed by the neglect of the duties which they owe to God.

It seems to me that conscience is of the very nature, personality, and identity of the soul. Deprive any one of his power of discerning between good and evil, between cruelty and benevolence, between candor and deceit, between holiness and pollution, and you have stripped him of his humanity quite as much as if you had shorn him of his power of distinguishing between truth and error, between fact and fable.

The question arises, What is the moral norm which, seated down in our nature, never changes, like the deep well which has the same temperature in summer and in winter? It may be difficult to express this precisely, owing to the mixing up of other things with our moral judgments and sentiments. But we can clearly see that there are certain acts which call the moral perception into exercise. Thus we approve of disinterested love, and regard the affection of a mother for her boy as a virtue. But there are cases in which the mother shows her love of her son in ways we disapprove of, as when she indulges him in what is injurious or displays an unjust preference of him over other boys. This shows that in moral good there is not only love, but law regulating love. Love ruled by law, this seems to be the quality in intelligent beings commended by the

conscience. And the opposite of this, selfishness or hatred or lawless love, seems to be sin, which is a transgression of the law.

It is the office of an inductive moral philosophy to inquire into the operations of conscience and thus construct ethics, which is the science of the laws of our moral nature, just as logic is the science of the discursive operations of the mind. As it thus inquires it discovers a law requiring love. This law is imperative and categorical, and is called by Kant the Categorical Imperative. When enunciated it takes the form, "As ye would that others should do unto you, do ye even so to them." It requires supreme love to God and equal love to our fellow-men. From these two principles, law and love, ethics has to draw the duties we owe to God and to the community.

JAMES McCOSH.

PHYSICAL HABITS AS RELATED TO THE WILL.

IN the attempts to formulate a general scientific theory of the facts belonging to the department of biology, a large place is at present assigned to physical aptitude. The actions of the lower animals, as well as the actions of men, are being watched to a greater extent than at any previous time. This has led into detailed narrative concerning the habits of animals when undisturbed by the observer. In such narratives the whole actions of animals are commonly described under the general designation of *habits*, leading to a very wide and indiscriminate use of this term. The materials thus supplied, however, serve to protect inquiry from the consequences which might otherwise follow from this vague use of language. There are actions which are done by an animal spontaneously, according to the laws of its own nature, and are as well done on the first occasion as after repeated practice. The nest-building of birds affords a sufficient illustration. Whatever theory may be offered of successful nest-building at the first attempt, it is clear that such action cannot properly be described as habitual, or as resulting from skill acquired by frequent repetition of the act. On the other hand, the horse which has been trained to run in harness has lost the awkwardness of its early movements in turning and following the guidance of the reins, and has acquired a prompt and steady style of action which no beginner in wagon or carriage could present.

Thus we find amongst the mass of observations bearing on the actions of animals a broad distinction between actions done without acquisition and actions acquired. We may, indeed, include both classes of actions under the vague general name of "habits," but more properly, for all philosophic and scientific purposes, the word "habit" must be restricted to

acquired actions, and thus only a limited class of the actions of animals contributes evidence as to the general problem concerning the possibilities of physical habits. When an animal breathes, lies down to rest, or rises up to eat, there is no example of habit properly so called. When a sheep-dog directs the course of a flock along the hill-side or road, in accordance with the call of the shepherd ; when an ox fed within an enclosure lifts with its upper lip the latch of the gate, thereby opening it and finding egress ; when a horse without indication from the driver turns unhesitatingly into a particular path which he is wont to take—these are illustrations of habit. How much hereditary transmission may have to do with particular aptitudes may be left an open question. That nature has something to do with aptitude is clear. A horse could not be trained to manage a flock of sheep as a dog can, yet a dog will worry sheep as a horse would not feel any inducement to do. There is thus confessedly in the dog a natural fitness for training under the shepherd ; but there is at the same time obvious need for control and guidance in acquiring the habits which make the animal specially serviceable to man. Suppose, then, it be granted that nature determines the possibility of action, and that heredity decides so far the cast of nature, the problem still remains for discussion, What are the conditions under which habits are acquired by those animals whose powers are best known to us, and whose training makes them most serviceable to us ?

An opinion has gained wide acceptance that much more is to be assigned to habit than has yet been fully recognized. This is nothing more than a floating opinion, nevertheless it is playing a not unimportant part in determining the mental attitude of an influential circle of thinkers. What account is to be made of man as an agent, relatively to the higher orders of animals, is a question whose whole meaning is affected by the latent supposition that man is a bundle of habits which if fully interpreted would prove such in their nature and conditions as to place him little above the higher animals, and that little could be easily measured by relative complexity of organism. Both philosophy and science are responsible for encouragement of hypothesis, and not without reason is it maintained that hypotheses render real service in the history of investigation.

On the other hand, it is the distinct task of philosophy and of science to attack every hypothesis with the demand for evidence. Temporary place and influence may be allowed to a plausible conjecture, but in due time it must vindicate its claims to respect, or disappear. Opinion may float for a season in the atmosphere undefined in form, but ere long it must be formulated and give substantial proof of its certainty, or it must like a cloud be dissipated in thin air. As Plato has insisted, opinion has no certainty, it may as well be false as true, and nothing short of certain knowledge can satisfy or hold permanent sway over the mind.¹

This opinion, that the action of all living beings may be interpreted by habit, in accordance with the possibilities of organism, needs to have its claims stated and tested. It has not taken shape in any well-defined theory, or series of conclusions supported by evidence recorded and verified. In absence of such definite statement, it becomes a natural part of the work of mental philosophy to set forth, if possible with greater exactness, and with adaptation of form to the problem engaging scientific observers, the laws of habit as illustrated in the physical activity of man. So far as habit may afford a test of comparison between man and animal, the relation of physical habit to Will must present the maximum of difficulty for those who imagine that man occupies a place closely related with that of the higher orders of animals. Moreover, the knowledge now possessed of the structure and functions of brain and nerve, and of the laws of sensori-motor activity, lends additional inducement for restating the problem as to the relation of physical habit in human life to the region of rational control. We have now a fuller knowledge of the laws of activity belonging to our bodily nature. Many of the questions whose answer was but recently nothing better than plausible conjecture have now found definite settlement, making it possible for us to speak with greater certainty as to many of the forms of physical activity commonly exercised by men. There is thus much in the present state of scientific knowledge, and also of popular speculation concerning the universe, to induce a re-study of the whole range of facts connected

¹ *Republic*, b. vi. 506.

with the acquisition of habits, and specially of that class of them which can be clearly and unhesitatingly distinguished as physical.

A survey of popular language, and even of scientific discourse bearing on the characteristics of personal habits, at once discloses a degree of vagueness from which escape must be sought if we are to avoid hasty and imperfect induction. When a man's gait in walking, management of the hand and eye as illustrated in the work of the engraver, and the craving for alcoholic drinks, are all classed together under the designation of physical habits, it is plain that there is need for some more exact distribution of the physical actions to which we refer. The three examples stated will further illustrate, even at this early stage, how misleading it must be to attempt to classify the habits of the lower animals and of men, as if they could be thrown into a common heap. The initial difficulty is most serious. We can indeed readily enough refer to the gait of an animal in walking, but some perplexity would be experienced in finding among animals examples of acquired skill familiar in human industries, or of the drunkenness often disgracing the seasons of human relaxation and social intercourse. It seems as if in our observations we were on the one hand immeasurably above the animals, and on the other as if we were suddenly far beneath the level of ordinary animal life.

From the few examples named, it is apparent that the question as to physical habit is a large one, calling for careful discrimination and introducing peculiarly interesting aspects of the problem concerning the human will. Widely different classes of actions are included under habit, distribution of which into distinct subdivisions becomes needful as the condition for satisfactory study. The *customary* in exercise, the *habitual* in action, and persistent *inclination* to act in a given way, have all been included in observations and discussions concerning the power of habit. There is indeed sufficient reason for all these being included, but there is also pressing need for having them carefully distinguished, and for constant guard being maintained lest some one feature be allowed exclusive attention or be taken as a uniform characteristic of the whole class of physical habits. If anything be required to impress on us the need for discrimina-

tion, and also for caution in adopting wide generalizations, it may be found in the simplest reflection on the relations to our own will, or rational choice, of the wide range of what is *customary* in human conduct, of the narrower range of what is *habitual*, and of the specialities of each individual life which may be described as tendency, or more actively as inclination, or still more strongly as craving. Without any skill in analysis or self-observation, it will be readily admitted that there are in these cases great diversities in the exercise of personal control. The customary may be that which is common among men, and may be spontaneous, or that in which exercise of will-power finds slight manifestation. The habitual has less in it that is common, more that is peculiar to the individual, and so involves more exercise of choice. Where tendency is apparent, or craving has become established, there may be natural predisposition, but with it there must be personal determination. Examples of strong craving present the most conspicuous illustrations of physical habit, and such craving at the same time exemplifies loss of will-power. This last consideration, more than anything else, has favored the view which has found wide acceptance, that habit is a form of activity separated from will-power; an opinion which presents a glaring example of hasty and partial induction.

Aristotle, looking at the question from a point of view entirely different and having regard mainly to the conditions of self-government, insisted on the intimate relation between self-directed energy and the acquiring of good habits.¹ According to him the rational nature supplied the rule of life, and the law of habit provided for the attainment of facility in doing what reason required. If, however, we turn to a quite recent period in the history of modern philosophy, occupying itself with psychological distinctions, we find prominence given to *inclination*, or *disposition*, as if it were an essential feature of the habitual action. Thus Hamilton has placed habit and disposition together as if they were naturally conjoined.² He was not making special mention of physical habit, and the purely psychological reference

¹ Ethics, ii. 6, 10.

² Hamilton's Lects. Metaph., i. 178.

must be noted in interpretation of many statements concerning habit which appear to bear a perfectly general reference. Inclination or predisposition is certainly characteristic of one class of physical habits, but only of one class. It is, therefore, so far from being a guiding feature that it is apt to be misguiding in the general study of the laws of habit. Indeed we can hardly have a better avenue for entering upon a course of essential distinctions than is supplied by an attempt to ascertain the extent to which inclination is or is not connected with established habits. The neglect of distinction here has led directly to the popular impression that habit implies separation of activity from control of the Will. The class of examples naturally occurring to every one in proof of the close relation between inclination and habitual action is obvious. It includes such indulgences as tobacco-smoking, snuff-taking, alcoholic drinking, and opium-eating. But immediately when such a group is presented, it is obvious that *action* properly so called performs a comparatively small part in the history of experience to which attention is pointed. Favorite occupations we might naturally call them rather than engagements, for they more fill up time than give exercise to our powers. A man may indeed be occupied with his smoking or his drain-drinking, but no great importance can be attached to the extent of action involved. *Sensibility* is the prominent element in all such cases, activity occupying quite a subordinate place; accordingly it is obvious that the study of such examples must result in determination of the conditions of growing sensibility and contemporaneous increase of desire or craving for indulgence. In this direction we can advance only a little way towards a knowledge of the conditions of physical activity which serve to illustrate the power of habit. *Activity* must be a prominent element in the illustrative cases which are to meet the requirements of the present investigation, sensibility occupying a place of relative subordination as marked as the conspicuous place it has in such cases as tobacco-smoking and other forms of indulgence commonly named physical habits.

We have thus placed before us two entirely distinct regions of inquiry, both of which need to be carefully explored if we are to attain an accurate knowledge of the characteristics of physi-

cal habit in human life, and of the relation in which they stand to will-power or rational control of life. A distinct philosophic problem belongs to each of these regions. The one is concerned with the conditions under which there is increase of sensibility, with proportionate increase of longing for gratification. The other directs attention on the conditions under which we attain greater facility in doing certain actions, thereby accomplishing more by our efforts. Looking at both classes of actions as physical habits, they are respectively concerned with the two distinct sides of the nerve system, the one with the order of sensory nerves, the other with the motor nerves. There is a set of physical habits in which nerve sensibility is the ruling feature; and another group in which motor activity is the leading characteristic.

1. *Physical habits in which nerve sensibility is the ruling feature.* Such things as tobacco-smoking, alcohol-drinking, and opium-eating are commonly referred to as conspicuous examples of physical habit. They are prominent illustrations not only on account of the frequency with which they are seen in certain countries, but because of their very marked effect. They are concerned with the sensory system of nerves, and are representative of a large and varied class of acquired appetites connected with the specialties of social life in different climates and countries. The use of condiments, different kinds of relish, and generally gratifications of the palate must be included in the same category, tho they do not afford so marked examples of physical effects. We take the more commonly recognized of these physical habits having connected with them strong appetite.

This class of physical habits shows activity at the minimum, sensibility at the maximum. Still they are rightly described as habits or habitual actions, inclination being a uniform element in the experience of the individual.

Analysis of the conditions involved will lead to explanation of *acquiring* the habit, carrying in it some account of the relation in which such habit stands to the Will. The prerequisite physical conditions are two, sensibility of the nerve system and a physical agent capable of acting on this sensibility. These two are entirely independent of the Will; the one as much as

the other, for the sensitiveness of our organism is no more matter of personal choice than are the properties of tobacco and alcohol. So it is with varying degrees of sensibility, on account of which some are more apt to become addicted to the use of stimulants than others. Greater or less sensitiveness in the organism is not matter of personal choice, any more than greater or less intoxicating power obtained by fermentation in different natural products. The primary conditions for such habits as those now under consideration are thus found in the natural sensibility of our nerve system, and in the natural properties of certain stimulants. These conditions hold for all men whether habits of using stimulants be acquired or not. Repeated action of the stimulating agent on the sensibility of the nerve system will induce habit. This introduces the element of personal action, and with it comes responsibility. Use of the stimulant is within the area of personal control; the effect of its use is quite beyond this area. The word "action" is thus taken in different senses, when we speak of the action of the person consuming alcohol and the action of alcohol on the body. The one is mental action, the other physical; or, in completed form, the one is mental determination directing physical activity, the other is stimulation of alcohol applied to the nerve system, resulting in a definite experience. As, then, personal activity is here at a minimum, the Will is contributing little to the result which inevitably follows. The mere physical agent is accomplishing what the will cannot directly achieve and cannot prevent. The Will is *doing* little, but it is *surrendering* much. By personal choice indulgence is repeated which is carrying the nerve system into a chronic state of excitability. By repeated action of the stimulant, sensibility of the nerves is operated upon in such a manner that craving is induced, and thus the Will's dominion over the bodily condition is being abandoned. In accordance with these well-known facts, the term "*habit*" is applied in a special and quite restricted sense, not to the habitual action, but to the bodily condition which has been induced. When reference is made to the habit of smoking or of drinking, the public eye sees under the word a persistent *craving* which makes the man a smoker or a drinker. There is a habitual condition of body which induces indulgence; not an action grow-

ing easier to the agent by persistent effort. What is here under observation is even the complete contrary of what we intend when we speak of a habit as an acquired facility in accomplishing what requires long practice as a condition of successful effort. This is the ascendancy of nerve sensibility over rational determination; the other is ascendancy of intelligent purpose over muscular appliances. There are two classes of physical habits, not only clearly distinct, but the opposite of each other in all their distinguishing characteristics.

There are, then, physical habits which are best described as *acquired appetites*. They become physical forces which dominate the physical life, having even the mental life in greater or less subjection. Like the natural appetites, hunger and thirst, they urge to satisfaction of craving, and the mind is left free for its own form of activity only as they are satisfied. There is, however, this marked difference between natural and acquired appetites: that the former by their gratification provide for continuance of the body in the healthy condition of the normal state, while the others tend towards increasing restlessness of the sensory system, involving the unhealthy condition of abnormal disturbance and uneasiness. An artificial hunger, once established, tends to become a tyrant, oppressing the whole life. There is in the early stage a wilful surrendering of the natural power of control over the body; in the later a distressing consciousness that the surrender is followed by a terrible dominion of the body over the higher powers of the life. The drink-craving is the expression of an established physical condition; the habitual drunkard must be classed with those suffering from brain-disorder, and at length becoming incapable of self-control; the deliverance from this extreme must in the first instance be physical, only at an advance stage can it become moral.

A position is now reached which places at command definite conclusions concerning both the organism and the will-power which is its natural governor. There is a law of nerve action applicable to the sensory system:—Repeated stimulation tends to awaken craving for indulgence. In the susceptibility of the nerve system there is facility for awakening and multiplying appetites. Whether this law holds in relation to all orders of a

sensory nerve system may be difficult to determine. But we know that domesticated animals certainly acquire a taste for kinds of food unattainable by them in their natural state, and for which they can have no natural relish. A less complex organism than ours may therefore be liable to have an increase of its appetites by artificial means. But the lower animals have greater security against such risk by reason of their lower intelligence, for it requires insight into the hidden appliances of nature to discover the sources of gratification which can awaken a strange craving. The gift of higher intelligence involves responsibility for direction of conduct such as cannot apply to a subordinate phase of intelligence. Ignorance is defence where knowledge brings evil. An animal may fall over a precipice and suffer from bruises and fractures just as a man may; but the animal cannot fall into the disasters of habitual intoxication as men do. The possibility of awaking artificial appetite is found in the sensibility of the nerve system and in the properties of natural agents capable of stimulating nerve sensibility; but the liability to temptation in this respect belongs to the intelligent nature capable of discovering the properties of natural bodies, and of adapting means to ends. There is, therefore, no adequate explanation of the number of acquired tastes and appetites existing among men, short of recognition of the high intelligence which is the peculiar attribute of the race, and the personal choice which determines physical condition in the history of individuals. Thus the pre-eminent intelligence of the human race and the individual exercise of choice are illustrated, and that on a level so low that mere animal life does not sink so far. Moral culpability and the greatness of our nature and its weakness are together established in a single line of conduct. There is dependence on intelligence for supply of stimulating agents; and there is dependence on personal choice for what shall be used.

Yet we are here considering a tendency so low in the scale of possible experience that we need scrupulously to guard our classification of it among human habits. Artificial appetite may become so essentially a physical condition that it may be inherited, and in such a case we are prevented from considering it a personal acquisition under the law of habit, even tho its

origin may be explained by habit indulged a generation farther back.

The present purpose will, however, be served by restricting attention to individual action and experience. What we have seen in connection with acquired appetite is that in process of origin exercise of will is at the minimum, and yet a momentous surrender of control over the physical nature is being made. There is little more than consent of Will, but it is consent to a process which is slowly withdrawing bodily tendencies from control, and slowly yet surely accumulating stores of impulse which may be difficult to master as the swollen river. Conflict with established craving may thereafter become a true measure of will-power. Will is at its maximum of effort when struggling for deliverance from the mastery of acquired appetite. Such a case presents one of the most impressive illustrations of conflict between mind and body. This struggle may indeed be altogether shunned, or may be abandoned after painful experience of its severity. The end may necessitate control by others, because of the whole powers of the life being overmastered, as by alcoholic craving. But let us observe the struggle for mastery as illustrating the relation of will to an abnormal but self-induced physical condition. There is not victory here without dire conflict, the conflict of reason and will against appetite. It is not as if the germs of disease had been received into the bodily system which might be removed by healthy exercise or by medical appliance. It is not as if a recognized fever had gained a hold, destined to run its course and disappear, if the physical energy prove sufficient to cope with it. Nor is the condition of body such that the dreaded tendency will be quiescent unless roused. Manifold causes tend to awaken and encourage it, but even without these there is the certainty of recurrence of strong craving. Stores of impulse have been laid up in the organism which will not exhaust themselves except in conflict with a higher power belonging to personal life. Yet is the rational being set at immense disadvantage in entering on the protracted conflict. He cannot by direct act will down the craving ; he cannot as if in single conflict grapple with his foe ; the adversary is too subtle to be seen and measured. As if some disturbing and paralyzing agent were coursing through his

veins, he feels himself unfitted for thought and purpose and action. Only by a long and weary course of discipline can he hope to fight his way back again to that healthier glow of physical life once known and enjoyed. Physical helps there may be, but his own purpose must determine and carry through the plan of action. While the distracting restless longing is felt within he must seek to concentrate on engagements which subvert it, and must sustain his effort by conscientious regard to the high moral purpose to be achieved, in the assurance that even a single period of rational activity through denial of appetite is an essential contribution to ultimate victory. These are the conditions of success so long as the conflict is at a stage which makes its leading characteristic that of a moral struggle, and this holds true in all cases save those in which the hapless condition is such that physical restraints alone prevent the saddest aspects of physical prostration. In the possibility of such conflict, still more in successive steps towards victory, and yet more in ultimate triumph, we have most convincing proof that human life is not dominated by physical law. There is a higher power which can beat back the blind force of appetite favored tho it be by all the accumulated advantages of long habit. Animal life affords no illustration of this. A conception of ideal excellence; a determination to throw off a bondage inconsistent with dignity of nature and purity of character; renewed struggle in face of manifold discouragements—these are the possibilities of human life, the possibilities of intelligence and will.

2. Physical habits in which motor activity is the distinguishing feature. We pass now from physical appetites to physical aptitudes. We change the field of observation from the laws which regulate the sensory system to those guiding the motor. Attention is now to be concentrated on the order of nerves which connect the nerve-centre with the muscular system, making it possible to regulate the movements of the body. The motor apparatus is in essential characteristics the same for man and animal. How far is there an apparent difference in the use made of this apparatus? Towards an answer I am here to ask, How far does the range of physical habit possible to man illustrate diversity of nature between him and lower animals? Whether the living organism be more or less complex, the con-

trivances which fit the organism for movement and work are the same. There is an arrangement of muscles all capable of contraction and expansion ; there are nerve-lines embedded in these muscles capable of controlling them by the action of nerve energy from the brain. There is besides intercommunication between the sensory nerves and the motor, so that sensory stimulation provides for motor activity. A touch from something offensive will induce recoil ; an odor attractive will cause advance towards it. There is thus a conjoint action of the sensori-motor apparatus in all animal life. When from this general statement we advance to the forms of action observed in different animals, we find that the possible range of activity is determined by the complexity of organism. The fish, the bird, the frog, and the horse are respectively capable of different movements and efforts according to the characteristics of the organism possessed. In strict accordance with this, man is capable of doing what none of the lower animals can do. Not any among them is capable of doing what he, with the utmost ease, can accomplish with the hand. This arises first from the fact that hardly any of the animals has a hand to work with ; secondly, that the few animals having a hand (together constituting a single class) do not naturally move in an erect posture, and consequently must use the hand to do the work of a foot as well ; and specially because man contemplates a variety of possible ends in a line of action and means for their accomplishment, afterwards setting himself by practice to acquire skill in novel forms of effort. These simple and very obvious considerations have only to be kept in view, in order to show that a vast amount of discussion with which we have now become familiar as to monkeys and apes is quite wide of the main question to be discussed concerning the higher nature of man. We propose to inquire how far the physical aptitudes of the human agent indicate the distinctive operation of Will-power.

Of physical aptitudes acquired by men under the law of habit there are *two quite distinct classes*, presenting two different phases of the application of the law. The general significance of the law of habit as bearing on action is given in the formula, *Repetition of an action gives facility in the doing of it.* In this form the law applies equally to mental action and to physical.

When, however, we concentrate observation on physical aptitudes, with a view to mark their relation to the intelligent regulation of conduct, we at once recognize two orders of result, so different from each other that they may be said to be contrary.

1. In the one case, facility abates the demand on attention.
2. In the other case, facility intensifies the demand upon attention.

Thus, a person who is only beginning to acquire skill in management of a complex machine, so soon as motive power is applied, finds it needful to give his undivided attention to his work, whereas one who has had long practice in superintendence of such mechanism can observe what is going on around him and freely talk with those in his neighborhood. On the other hand, the artist of large experience in all that belongs to the representation of form and color would still feel it a distraction to have others in the studio, either moving about there or interposing suggestions as to his work. Deeper and minuter distinctions may yet be required to make good the contrast between two entirely different orders of result, but these two examples may suffice to mark the boundaries of separation. As the degree of attention required is an accurate measure of will-power in operation, this distinction becomes important in estimating actual result from application of the law of habit to human activity.

First, Aptitude with diminished attention. This includes all the more ordinary forms of activity, involving least exercise of intelligence. To this class may be referred walking, riding, swimming, and speaking, in so far as this last implies management of the organs of articulation by imitation of familiar sounds. No one of these exercises, even the most ordinary, is attained without some exercise of intelligence. In this respect man, tho the higher order of being, is placed at a marked disadvantage—a fact which requires to have significance attached to it in interpretation of the distinctive conditions of life. The young of lower animals *walk* without any need for training; if only they have strength, they have equilibrium and easy exercise of locomotive power. A child needs not only strength but training. The intelligence of the child must play a part in order that it may balance itself first on two feet, then singly on one foot after the other, and then direct its movements. The conditions

under which the child walks are thus quite different from those observed in the case of the young of the most familiar animals around us. The man possesses the same locomotive apparatus as lower animals, higher conditions are imposed on the early practice of locomotion, and these point to a higher type of exercise possible to man, illustrated in infancy, and not exemplified in the history of the lower animals. Nevertheless this exercise of intelligence is required for the attainment of facility in a kind of movement which afterwards requires the smallest degree of attention to be found in any phase of human conduct. Walking at length becomes an exercise so mechanical that we are not conscious of direct intervention of Will to maintain the exercise.¹

When a child learns to *swim*, he must be still more advanced in intelligence than when he learns to walk. In striving to bring the arms as well as legs into use for support and propulsion of the body in water, he is really descending more to the level of the ordinary forms of muscular action belonging to quadrupeds; but he finds the exercise novel, and requires to apply intelligence to ascertain the modes of adapting his muscular effort to the altered conditions. The dog needs no training, but plies his feet as if he were running; the child must exercise his intelligence, and acquire by habit facility in the special kind of muscular action needful. Intelligence and will are both manifestly at work in the latter case; they do not appear in the former. Yet when the art of swimming has been acquired, the person moves about in the water with so much ease that comparatively little attention to the action of the limbs needs to be maintained. More attention is demanded, however, than for walking, and that obviously because a larger amount of physical effort is needed than in walking. The demand for effort being greater than under ordinary experience, the provision for its maintenance is found in personal direction of physical energy towards a contemplated result.

In *speaking* (meaning by that only facility in articulating so as to emit certain sounds already familiar to the ear), there is

¹ Stewart held that "actions originally voluntary always continue so."—*Elements*, chap. ii. *Collected Works* i. 127.

obvious need for the exercise of intelligence. The vocal organs require to be brought into subjection to the will of the agent. The sound, at first inaccurate, needs to be modified, until it fall upon the ear as a harmony with what is otherwise sounded. There is no analogy to this in the bleat of the lamb, in the lowing of the calf, or in the barking of the dog. Accordingly speech is an illustrative case of acquired facility leading to diminished attention which occupies a kind of intermediate place, contributing illustration of what can be done without attention, and what in the very same exercise makes a constant demand upon attention. The explanation lies in the obvious fact that in all ordinary speech there are two distinct forms of activity, the one purely physical, the other as distinctively mental. The one is the regulation of lips, tongue, and thorax; the other is the regulation of thoughts and feelings which are to have expression through the agency of recognized signs. The management of lips, tongue, and throat may proceed without a consciously distinct purpose for execution of each movement; the regulation of thoughts and feelings so that they may have fit expression cannot proceed in like mechanical conditions. The same complexity applies in *writing*. This sufficiently explains how it happens that there are certain phases of human activity, in which facility seems to imply diminished attention, and yet in another sense seems really to involve increased attention. These are complex examples, running into both classes, and carrying within themselves illustration of both phases of the application of the law of habit.

Second, Aptitude with increased attention. In contrast with the class of cases already considered stands the whole class of physical aptitudes special to individuals, constituting skill in manufacture or art. The skill of the engraver or limner who by combined action of hand and eye produces a beautiful sweeping curve, and by a succession of such touches presents an outline of some object, illustrates a power peculiar to himself. By slow and laborious effort he has acquired the power of doing such things with facility. A beginner, who seeks to reproduce the copy, shows by the uncertainty of manual action, by the irregularity of his lines, and by the disappointing appearance of the whole production how much has to be acquired before he can

have the facility of movement, and delight in the occupation, belonging to the skilled draughtsman. When in such a case as this we observe the results, there is a marked contrast in the demand upon attention connected with the acquired facility. Walking becomes a mere mechanical movement, drawing never does. However great the skill of the draughtsman, he needs to have a conception of what is to be produced, and he must voluntarily direct his power in such a manner as to give effect to the ideal in his mind. No man has this to do in ordinary walking. The contrast is so obvious and well recognized that it need not be insisted upon. But it distinctly marks off the two classes of aptitudes connected with motor activity. There is a facility needed by all for the ordinary purposes of life; and tho it is acquired by voluntary effort, when acquired it descends into a quasi-mechanical phase of movement, in continuance of which we are not conscious of direct volition concerned in each act. In contrast with all this there is a facility attained only by some, for which peculiar taste and aptitude are needful, in the exercise of which a special product is secured, as in the case of the artificer; or, on a higher level, requiring higher gifts of intelligence and imagination, as in the case of the artist. Thus we have conspicuously a second and greatly higher class of aptitudes, acquired under the law of habit. Their distinctive feature is that a constant and important demand is made upon personal attention, notwithstanding the marvellous ease acquired in doing the work. This is not the habitual in the sense of the unnoticed, but the habitual as it is found within a sphere where is need for regular and absorbed attention. When we look into the elements involved, we still find present the features of the first class of aptitudes, but a second and more important order of features has appeared. Facility in manual action is attained, so as to liberate attention from mere muscular guidance; and the needful concentration of attention on the more properly artistic requirements is thereby made possible. Marking this contrast, we see physical aptitude providing for concentration of mental power. An established control over the muscles renders easier and more effective the requisite command over thought. There is in all such cases a double application of the law of habit; there is a physical aptitude and a mental. The relation between

these two is essential and intimate, and in their relationship we have the strongest proof of the operation of will-power as the condition for attainment of the enlarged and elevated ability discovered in the history of individual life. Each man is physically and mentally what he has made himself by long and laboriously maintained effort. It is true, as has been said, that man is a bundle of habits; but the truth involved is recognized and interpreted only if it be observed that persistent resolution has first continued at muscular effort in a particular direction until that has become easy, and then, liberated for higher effort, has fastened on higher exercise of power belonging to intelligence. The law of habit does not here appear as a law reducing all to the mechanical, but a law providing more readily for the triumph of a higher nature, the behests of which are fulfilled by the complete subjection of muscular power, as in skilful manipulation. In its highest reach the law of habit does not illustrate the involuntary and mechanical, but the reign of voluntary power. The most important physical aptitudes, which awaken the wonder and admiration of observers, are the direct result of concentrated intelligent effort. The proof of this lies at hand on every side. In all the more difficult gymnastic exercise, in all open-air sports under codified regulations, in all the productions of the skilled artisan, in all effective musical performance—whether vocal or instrumental, in all the work of the painter, in all the efforts of the orator, evidence is supplied. In all these cases there is physical exercise which has become easy by habit, requiring little direct exercise of will in management of details, yet demanding concentrated attention through the whole procedure, in order that full advantage may be taken of the acquired facility for accomplishment of a contemplated result.

The whole order of physical habits belonging to the possibilities of human life are now under observation, and the result is three distinct forms of relation to the Will. *First*, there are habits connected with the sensory system. These are voluntarily originated, but with little effort; when established they operate irrespective of personal choice, thus gaining a form of ascendancy from which personal deliverance can be achieved only by lengthened yet indirect effort. Will-power here is illustrated chiefly by the facts connected with overthrow of the

habit. *Second*, there are habits connected with the motor system which need intelligent self-direction while they are being attained, but almost no such direction in practice after the habit has been established. In these cases will-power is illustrated only in the earliest stages of effort, when the facility is being attained, hardly at all in the use afterwards made of the attainment. *Third*, there are habits of the motor system which rank among the special attainments of individuals, and which are acquired only by long effort, begun at a more matured period of life, afterwards continued with growing ease and satisfaction. Here we find direct personal effort constantly connected with the habitual exercise. Only in this third and highest class of habit is continued voluntary effort an essential feature in practice, and here accordingly we have the clearest and fullest evidence of the action of will-power as characteristic of the rational agent. These are physical habits which are also essentially rational habits.

In this classification of habits we have a clear gradation on an ascending scale. Comparison with the facts of animal life gives some contrasts of much interest. The first and lowest class, habits of sensibility, as they are connected exclusively with the animal life, are commonly referred to as placing man on a level with the brutes. Yet these are habits hardly to be found among the lower animals except in the simplest form. There is thus a danger to human life of descending lower than the animals; but in connection with this danger there is also the possibility of conflict and victory, illustrating far higher power than appears in the history of any species of lower animal. The second or intermediate class of habits includes the lower order of aptitude connected with the motor system, which may be described as the common muscular acquirements of the human race. In this class is included a kind of action which the lower animals execute without needing to acquire it, and also a range of action which they cannot attempt. Comparison here whether by reference to the advantages for the animals or their disadvantages is not exhausted by reference to organism. What is to the advantage of the animals, as in locomotion, shows the absence of intelligent exercise in movement. What is to the disadvantage of the animals, as in speech, illustrates not only

deficiency of vocal organs, but also inferiority in intelligent direction. The third or highest class of habits includes all those physical aptitudes which distinguish men among their fellows, becoming marks of superior ability. These are essentially connected with exercise of Intellect and Will, and are peculiar to men, very strikingly illustrating the superiority of the rational nature as a governing power utilizing the appliances belonging to a very complex organism.

In view of this threefold division of physical habit illustrated in human life, it is impossible to insist on *inclination* as a common characteristic of habitual action. This belongs to habits of the sensory system, but not in the same way to habits of the motor. Prominence assigned to inclination tends to narrow and perplex our study of the physical tendencies and possibilities of our nature.

Facilities in action which are such as to make a constant demand on attention present the most important set of facts connected with the present study. I have spoken mainly of what belongs to the acquisition of aptitudes. Additional interest and instruction are found in the facts connected with loss of facilities once possessed. We are familiar with the vexation often experienced in this connection. A contrast in this respect, separating a lower class of aptitudes from a higher, deserves to be carefully chronicled. Of facilities acquired in various forms of motor activity, some are more easily lost than others. The man laid aside under protracted illness does not forget how to walk. If a man who has previously learned to swim is suddenly thrown into the water, the first few strokes he gives reveals the fact that "he has been in the water before." The art has been long unpractised, but the cunning has not been lost. In a different class of cases the facts are altogether the reverse. Here to be "out of practice" is a calamity. The performer who once experienced delight in handling his instrument may a few years later shrink with nervous apprehension from the attempt to repeat what had once been done with ease so great that it hardly seemed to cost an effort. The man once a skilled artificer, abandoning his art, by and by becomes weak as other men. If the cases illustrating such opposite results be considered, it will appear that they belong to the two different classes of

aptitudes distinguished above. When the law of habit brings a facility of action which thereafter makes slight demand on attention while the action is carried on, the aptitude is not readily lost. On the other hand, the power of habit fails most readily when continued exercise of intelligence and will remains the condition of successful effort. Any one who ponders the conditions of mental activity will see how naturally forgetfulness and loss of manual aptitude go together. This testimony from loss of physical aptitude harmonizes with what has already been demonstrated in connection with the acquisition of such habits. Only by persistence in self-directed activity does a man achieve the success which awakens the admiration of others. By natural law it follows that cessation of such self-directed effort must end in loss of power. Thus is it that the easy loss of the higher class of physical aptitudes bears witness to the ascendancy of Intellect and Will through all the most important achievements of manual dexterity. There is in all forms of habit belonging to human life, whether they wear the aspect of tendency towards the agreeable or facility in doing what is naturally difficult, dependence on voluntary determination, while in all the higher class of aptitudes this dependence is uniform and intimate, constituting an essential condition in practice. The general conclusion is clear. The history of our habits is the history of our personal resolutions.

HENRY CALDERWOOD.

LATE AMERICAN STATESMEN.

TO foreign nations, as well as to posterity, Lord Bacon appealed to vindicate his name. It is but natural that in this country, the arbitration of posterity not being available, we should turn with interest to the arbitration of intelligent observers in foreign states. Von Holst's volumes on our constitutional history, therefore, have been received among us with curious interest, and in some respects with satisfaction. He has laboriously studied such accessible documents as are relevant to his topic, few of any importance escaping his search. He has no such sympathy with any one of our present parties as would prompt him to enlist as its champion. But these advantages are more than counterbalanced by two great defects. The first is a reactionary temper, causing him to disparage not merely republican institutions, but republican statesmen. Of this I shall hereafter give illustrations in detail. The second defect, which I will first notice, is that which leads him to resolve all political movements, both here and elsewhere, into two great conflicting forces, the force of reform, or as he sometimes is pleased to call it, of destruction, and the force of what he calls conservatism, which others might call reaction. That this is both philosophically and historically untrue I now proceed to show.

That there are conditions under which retention is revolution, and in which reform is conservatism, and that under such conditions reformers and conservatives change places, is a position our critic himself concedes, and which goes far to explain many of the apparent inconsistencies in the conduct of our public men, especially at and before the late civil war. This obvious qualification, however, I do not now propose to discuss, turning in the following pages to the consideration of political forces.

less patent but more potent. Strong, indeed, in the minds of public men may be the tendency to preserve and the tendency to change. But still stronger are other tendencies to which I shall proceed to advert. It may be that in accepting the championship of these tendencies the great statesmen Von Holst has criticised were in error. My contention, however, is not only that these tendencies are the natural outgrowth of advanced civilization, but that they have been represented in our councils with ability and consistency at least as great as were displayed in their vindication in the Old World. If this be true, not only will the enigma which has distressed our German critic be solved, but the aspersions he has thrown upon some of our leading statesmen will be repelled.

The first of these tendencies is the imperialistic—that tending to national aggrandizement, to national glory, to national unification. It is impossible to understand the politics of the United States without recognizing the power of this tendency. It would be very strange if it should not exist with us, when it has worked so powerfully in the country whose traditions we inherit. Strafford, Cromwell, Chatham, for instance, how was it with them? They were imperialistic statesmen in the highest sense of the term. England's grandeur they sought with passionate devotion, widely different as they were in character in other respects; and to achieve England's grandeur consistency was flung aside, and the party lines of conservatism and of progressivism set up or trampled down as the occasion might suggest. Strafford in one sense was never a truer liberal than when he was executed as a traitor to the liberties of the realm; nor a truer conservative than when he led the liberals in apparent vindication of those liberties in opposition to the crown. Cromwell's little finger, as was often said of him, was heavier than Charles' arm; Cromwell put down revolt with a severity and ferocity which neither Tudor nor Stuart had attempted; yet Cromwell, supposing that by so doing the growing grandeur of England would in no way be imperilled, preferred that there should be equal toleration to all religious beliefs, and equal political opportunities to all subjects. Chatham was no less a friend of liberty at his zenith, when he reduced even the king to the level of a satrap, than he was in his stormy youth, when

in the House of Commons he denounced the great Whig magnates as the satraps of a king. But with Strafford, Cromwell, and Chatham, dissimilar as they were in other respects, the grandeur of England was the supreme end to which everything else was to be subordinated. What they sought was not grandeur so far as it contributed to unification and liberty, but unification and liberty so far as they contributed to grandeur. Strafford, Cromwell, and Chatham were equally resolute and uncompromising in the determination that England should rule the seas, and that whoever contested this supremacy, be he French, Spanish, or Dutch, Catholic or Protestant, old ally or old enemy, monarchist or republican, should be smitten down. The empire must hold a firm hand on all its dependencies, so they all cried; and tho if this is done by the free will of the colonist, through a local parliament, it is better, yet if such consent cannot be obtained freely it must be coerced; and by this solution only we can understand how Chatham, who had so vigorously maintained the rights of the American Colonies to local freedom, was for resisting with the whole power of England their independence. To Strafford, to Cromwell, and to Chatham, free trade, as we learn from their writings, was theoretically right. To them national wealth was of interest only so far as it conducd to national greatness. They accepted virtually Bacon's aphorism that a rich nation without imperial power and imperial aspirations is not only a weak nation, but a nation lapsing into moral and social degradation. They had, therefore, no particular desire to protect wealth by granting monopolies to particular banks or protection to particular manufactures. But to corporations which would be useful to the state they were ready to give monopolies, and manufactures which would make the state they were ready to protect stronger and more self-containing.

It is by the test that has just been applied that we can explain the character of Mr. Hamilton, which Von Holst finds so much difficulty in comprehending. Between France and England, between monarchy and republicanism, between universal suffrage and no suffrage, between slavery and abolition, Hamilton had no preferences for which he would sacrifice the grandeur of the country whose independence he had defended

with his sword, and in framing whose constitution he had taken so conspicuous a part. But wherever he was placed, his destiny was to rule. His attitude was that which Heine ascribed to Napoleon. He spoke as if saying :

“ *Non haberis Deos alienos coram me.*”

What his temper made him, his temper led him to desire his country to be. It was, as far as he could make it, to dominate, if not the world, at least the Western Hemisphere. He would as unhesitatingly have plunged us into a war with England in 1799 as he was ready to plunge us into a war with France, had English insults and encroachments been aimed as directly at our sovereignty as were those emanating from France. But overbearing as had the English been,—and for this he was ready when the time came to call them to account,—theirs had been an open bluster, while the French directory had sneered while it plundered, had insulted us in Europe by speaking of us as the creature of France, and insulted us on our own shores by appealing from the President to the people; had manned and furnished her cruisers in our very ports, in defiance of our warnings and prohibitions, and in like defiance had enlisted troops in our streets. We could not be an equal in the family of nations,—we could not be a nation at all,—if this was not promptly put down. And Hamilton was for promptly putting it down.

The same explanation may be made of his supposed monarchical prejudices. He panted, indeed, to see a splendid empire on these western shores; but to put a European prince on its throne was a project which he would have spurned. The elect of the people alone was to wield the sceptre of the New World. Such a ruler should be in for life, counselled by a life senate. Such a government, holding the sword, controlling the purse, would be of all others the most likely to give the new republic imperial rank. Liberty was not what Hamilton had in view as his prime end, nor was it a merely stable government, such as that which the timid conservative desires for the sake of peace. What he wanted was a government strong for war as well as for peace; a government which would challenge with England the dominion of the seas, with France the control of the Indian

country; which would tolerate no rival in the New World; which would be able to protect freedom which without such protection would be worthless, and wealth that without such protection would be a curse.

So it was, also, with regard to the Bank and to domestic manufactures. Hamilton has been charged with subserviency to the moneyed classes; with exaggerating their importance to the community; with striving, if not from corrupt motives, at least from a vulgar admiration for gold, to obtain for them special privileges. This is not true. He had no special predilection for wealth. He cared little for money. He never hoarded or worshipped it. He would have flung bank and manufactures overboard if he had thought by so doing he could have promoted that national grandeur he had so much at heart. He was keenly conscious that a rich state ill defended is far worse than a poor state well defended. The meanness, the feebleness, the moral depravity of the rich Italian states who relied on mercenary troops for their support, he was prompt to call in mind. But he remembered that in England's peril she had found a state bank a valuable auxiliary, and a state bank he determined to have. He believed that the more generally and largely government bonds were distributed, the more efficient would be the interests enlisted in keeping the government in good condition; and he therefore urged that the federal government should assume the revolutionary debts of the States. He desired to see the country independent of all foreign states; and so he advocated a protective tariff. He was no more in favor of protecting manufacturers than he was of protecting farmers. But by protecting manufacturers, farmers would not have to go abroad for their cloth and their cutlery, and so manufacturers were to be protected.

The same key will explain what may be otherwise inexplicable in Mr. Clay's character, and will rescue that gallant statesman from the discredit attached to him by Von Holst. Mr. Clay was not, as is at one time insinuated, an audacious gamester in politics, nor was he, as we are told at another time, an adroit intriguer. He had, no doubt, certain great defects. He felt no interest in the philosophy of politics; and he scoffed at the very name of political or social science. Liberty; the comfort

and cultivation of the people generally; the establishment of educational institutions: these were undoubtedly important objects to him, but they were subordinated to that of the grandeur of the country to whose service his life was devoted, and to which he bore so ardent and chivalric a love. The general welfare of humanity, the establishment of a peaceful brotherhood among nations, were things to be desired; but first let the dominancy of the United States be secured. It may be that in thus subordinating liberty, wealth, education, the advancement of the race, to the political grandeur of the United States, Mr. Clay made a mistake; but if so, it is a mistake which ought not to be imputed to him as a discredit by a follower of Bismarck. How far, however, it was a mistake we may notice in detail.

The administrations of Mr. Jefferson and of his two immediate successors had been based on the principle of *laissez faire*. Government, at all events, was not to undertake that which could be best done by the people themselves. Roads it was not to build unless necessary for military or postal purposes. Manufactures it was not to protect unless such protection was essential to revenue. The public debt was to be swept away as soon as possible, and public expenses reduced to a minimum. No armaments would be necessary, since sound political economy would demonstrate the folly of the war. It was here that Mr. Jefferson made his cardinal mistake. His optimistic and tranquil temper caused him to forget that in great public crises men are governed by passion rather than intellect, and that even to France, to which he was so much attached, and the thriftiness of whose population he never ceased to extol, conquest would become more attractive than thrift, military glory more powerful an impulse than love of liberty. Instead of the era of peace to which he looked forward, each successive year of his administration witnessed the extension of the area of the war, until at last the great contending parties not only fought their battles almost within our harbors, but used our shipping as a base of supply. Unarmed ourselves, we were spoiled to contribute to their armaments.

Under such circumstances an imperialistic party naturally sprung up. "What is peace worth," was the cry of many ardent and capable young men then entering public life, "if

it means spoliation? Of what value is governmental non-interference, if our shores are exposed to invasion and our character to disgrace? What is wealth so acquired but a lure to the invader? Better a vigorous state, honored and feared by its neighbors, with poverty, than a state rich, feebly governed, and despised." A strong government—a government with a deep purse, with efficient naval and military force to command a first post among the nations—was the cry; and with this cry Clay, Calhoun, and Lowndes entered Congress with others of less eminence but not less earnestness in the conviction that a government of vigor and splendor was required. To federalism they had not the slightest desire to return. What they wanted was a government not of reaction but of progress; a government not admiring but defying England; a government not dislocated but consolidated; a government thoroughly sympathetic with the people, at once their creature, their master, and their champion—a government which, springing from the people, was to do everything for the people, was to make them rich and prosperous in order that they might be great.

Whoever afterwards flinched from these views, there was no flinching on the part of Mr. Clay. Had it been necessary, he would have been as ready in the last year of his gallant life to fling defiance at the most powerful foreign prince who insulted the flag as he was in 1812 to fling defiance at England, tho England was then the conqueror of the world. He was as ready in his last years to drain a life tremulous and weary in order to avert disunion when threatened from the South, as he was to pour all the energy and promise of his youth into the scale to avert disunion when threatened from the East. It is not, however, as to these points that Mr. Clay's title to statesmanship is questioned by our German critic. His distinctively American policy—Internal Improvements, National Bank, Protective Tariff—is the subject of attack. These measures from both a philosophic and political stand-point may have been wrong. Mr. Clay, however, cannot be judged in this way. That an imperialistic policy is a legitimate phase of statesmanship; that in some instances it has met with great success; that in certain crises it is essential to national resuscitation—this is an axiom of the school of historians of which Von Holst is a member.

Whether this policy is permanently best for this country is one question. Whether Mr. Clay's measures were consistent with this policy is another. If they were, we may attribute to him the same qualities as a statesman that we have attributed, tho in varying degrees, to Strafford, to Cromwell, and to Chatham. We will rescue him from the list of time-serving politicians to which Von Holst consigns him. We will place him among the great leaders of public life who, tho adopting, it may be, a wrong theory; and dealing, sometimes insolently in their exuberance of energy, sometimes capriciously; yet in the main acted nobly, generously, and loyally, and with a grandeur of conception suitable to the grandeur of the object they had in view.

It was natural that Mr. Clay should have hurled back with haughty contempt the insinuations that he had any personal interest in either bank or tariff; it is strange that such insinuations should be muttered now that he has been twenty-eight years in his grave. He had no personal affection for the Bank of the United States either in its earlier stages or its later. He vehemently opposed it, at the outset of his political life, at a time when he supposed that it would be an agent of disintegration. He afterwards as vehemently advocated it when he held it to be necessary to the carrying on the war with England, and to the consolidation of national power. It is true that he was its champion in its war with General Jackson, and that during that heated campaign he spoke of it as a bulwark against capricious executive usurpation; but he did this for the very reason that he held the bank, in a normal condition of things, to be a great element of national strength. He may have erred in this. But if so, he erred with others of the great line of statesmen with whom he is to be ranked. William III., than whom no one had a keener eye for agencies by which national grandeur was to be subserved, insisted on the charter of the Bank of England as an essential condition to England's success. Chatham, long after he was alienated from the Whigs, and during the very period when he denounced Whig subserviency to the monetary interests, turned to the Bank of England as a necessary ally in the furtherance of his imperial plans. No statesman, looking to government as the agent by which the grandeur of a state can be

effected, but must feel that it is essential to government to have under its control a bank which it can draw upon to surmount, if not to avoid, convulsions either in war or trade. The position that an imperial government is necessary to make a people strong and prosperous may be wrong; but if right, it is hard to see how to avoid the conclusion that such a government should have allied to it either a national bank or an equivalent monetary agency.

The same motive explains Mr. Clay's course as to Internal Improvements. We may now say, without even a question, that it is well for the country that the splendid plan of canal and turnpike construction devised by him made no progress. It not only would have vastly and dangerously increased federal patronage, thereby greatly increasing the stake at elections and the consequent excitement and corruption; it not only would have greatly increased federal debt; but it would have sunk hoards of money and labor in turnpikes soon to be abandoned for railroads, and in canals which steam navigation in river and sea would supersede. But to his gorgeous aspirations it was essential that there should be great national thoroughfares between North and South and East and West, as majestic and as enduring as the roads of imperial Rome, and that these thoroughfares should be so multiplied that not only the products of all the numerous sections of our great country could be readily interchanged, but its military resources could be kept well in hand. Such thoroughfares would be necessary in times of war. They would be useful for the postal service. But above all things they were needed to perfect a nation which in union and strength was to occupy half a continent, and which, while republican in structure, was to be imperial in power.

It is remarkable that not only in the popular eye but in the eye of a foreign critic Mr. Clay should be viewed as representing, conjointly with Mr. Webster, the monetary and manufacturing interests of the land. In order to understand Mr. Webster's stand-point, we have to depart very far from the imperialistic school, of which Mr. Clay, as we have seen, was, since Hamilton, the most conspicuous chieftain. The monetary school, whose representative Mr. Webster distinctively was, requires independent discussion.

Two misconceptions, however, must first be removed. The first is as to Mr. Webster himself. It is a matter of regret that Theodore Parker's denunciations of Webster as corrupt, and as the supple slave of the money power, should pass into European history. Mr. Webster lived, no doubt, among men who were accustomed to make money largely and to spend money largely. His marvellous forensic gifts placed before him what he might naturally consider an inexhaustible fund of wealth; and if clients were not at hand to pay in advance, there were friends ready to pay all that could be expected from clients. He bought whatever he had a mind to, just as he expected to make whatever he had a mind to. He was indeed "*alieni appetens, sui profusus*," yet it is an injustice to apply to him the term corrupt, or to assert that he was a slave of the money power. In receiving large sums from his constituents when representing them in Congress, and deserting for this purpose his profession, he followed the example of Burke, who was unable to remain in Parliament without an income his political friends supplied, and of Grattan, who accepted, without the slightest aspersion on his fame, fifty thousand pounds from his constituents, to enable him to continue his public services in their behalf. Nor was Mr. Webster the slave of the money power. On several occasions, when his anger was roused by it, he flaunted his defiance in its very face. It is true, however, that his public services were given in the main to the support of the monetary party. The object of that party is national wealth. This Mr. Webster believed to be an object worthy of a great party; and this party he was content to lead.

The other misconception is that there is something peculiarly American in such a party. It is no doubt, as has been said, a matter of serious doubt whether national wealth is an object to be sought for itself. It may be well argued that as when a man makes wealth the prime object of his life he becomes sordid, sometimes servile, sometimes false, generally narrow, and never ultimately happy, so it is with nations. It has been further argued, as we have noticed, that there have been no nations which have submitted to humiliations so great, and whose moral tone became so low, as those who thus made wealth their primary object, no matter what may have been their mere mone-

tary success. This all may be true ; yet it is no less true that some of the statesmen to whom England has appealed with the greatest pride have been eminently monetary statesmen. It was so with Sir Robert Walpole. "I want to make the people rich," was his cry. "I want to reduce, if I can, the debt ; to build up manufactures ; to extend commerce. When I do this my work is done." He was eminently a liberal. He was singularly tolerant. His personal attachments were largely among the dissenters. In trying periods they had stood by him ; in still more trying periods they had saved the Hanover succession. Yet when the dissenters came to him to be freed from the miserable humiliations of the Test and Corporation acts, he put them off. "It is of no use now," he said. "But when?" was the inquiry. "Never in my time." It was enough for the dissenters to grow rich, which they did to an eminent degree ; and if rich, did it hurt them to be compelled once a year to go to church ? So was it with the Spanish war. Spain undoubtedly did her best to tease England into an abandonment of the alliance with France which Walpole had so skilfully cemented ; and Spain was ready, by undisguised insults, to provoke a war with herself. For years did Walpole bear these insults with calm equanimity, so that England might become richer ; tho it is well for England that under Chatham's impetuous lead this period of tranquil indifference, followed by almost equally tranquil war, was terminated.

But while the dissenters were thus put off, and war evaded, wealth grew. It grew in a way very inconsistent with what we now consider right principles of political economy. It grew in spite of protection, in spite of bounties, in spite of monopolies. The tree of British industry was then but a sapling, and it had to be boxed in. But wealth grew then, just as it grew afterwards when Cobden, another monetary statesman, feeling that the tree would grow better without the box, cut down the box. And Cobden, tho holding speculative opinions as to trade the opposite to those of Walpole, like Walpole subordinated all other things to the obtaining of wealth. Walpole was a protectionist ; Cobden execrated protection. Walpole thought wealth could be produced by establishing monopolies ; Cobden, by destroying monopolies ; yet to Cobden, as to

Walpole, wealth was the great end. It would not merely give splendor and efficiency to the British capitalist, but it would give comfort and competency to the British laborer. If war should come, it would end in favor of the party having the most money. But war was not to come. Let the nations know where their interests lie, and they will not permit war. The delusion, like that of Mr. Jefferson, has been dispelled by subsequent events. The most fearful tornado of modern political life followed the inauguration of *laissez faire*. The promulgation of free trade by England, true as the doctrine may be, and of necessary ultimate acceptance, finds England at war, not with great powers, in wars she could avoid, but with a series of little powers, with whom her wars are of her own making.

That Mr. Webster is properly to be placed in what I have called the distinctively monetary class of statesmen a critical examination of his history will show. He began his political career as a free-trader, and he ended it as a protectionist; but Cobden was a free-trader and Walpole a protectionist. When Mr. Webster was a free-trader, he advocated free-trade on Cobden's reasoning that free-trade would increase national wealth; when he advocated protection, it was for Walpole's reason that protection would increase national wealth. So was it in respect to war. He could see nothing but financial ruin as resulting from the war of 1812, and he was ready to close that war at any time when it could be done without absolute disgrace. It was so with the controversies with England with regard to the Maine and Oregon boundaries. Lord Ashburton, as well as Mr. Webster, was of the monetary school; and in the correspondence between them the issue is viewed not as something in which national spirit was involved, but as a matter of profit or loss. It is to be observed, also, that in Mr. Webster's speeches on internal improvements the military plea, made so prominent by Mr. Clay, sinks out of sight, and the prominent ground exhibited is the general welfare. The new roads were to be the channels through which national wealth would flow, and by which each producer through the whole of our diversified country could change that of which he has a superfluity for that of which he is in want. The antithesis before us is marked, also, in the attitudes of Mr. Clay and Mr. Webster, when a tariff com-

promise was proposed, at the nullification crises as a mode of conciliation. To Mr. Clay national wealth was valuable only as a means of national grandeur ; and while he was for national wealth when he thought national grandeur would be served, yet he would fling national wealth aside in a flash if he thought national grandeur could be thereby rescued from an immediate peril. Mr. Webster was ready for no such sacrifice, for the school with whose views he was perhaps unconsciously saturated holds that national grandeur is best promoted by first caring for national wealth. The antithesis is further illustrated by the theories of the Constitution held by these great statesmen. By Mr. Clay the Constitution was regarded as the edict of the people in their majesty ; by Mr. Webster as a contract between States bound together by a tie they had themselves made indissoluble unless by consent. Mr. Clay thought that whatever would conduce to national grandeur was within the compass of the instrument, and therefore he insisted on the constitutionality of the annexation of Louisiana, and even of Texas, hesitating as to the latter, however, in respect to policy. Mr. Webster denied the constitutionality of either annexation, tho he had no manner of doubt that Congress, under the clause enabling it to legislate for the general welfare, could take any measures promotive of the prosperity of the population inhabiting the particular States. In their relation to slavery, also, the same contrast is to be seen. There is no question that Mr. Clay deplored slavery, and with the earnestness of his passionate nature wished it away. There is no doubt that he felt it to be a blot on the national splendor and an impediment to national progress. To attempt to restrict it by national legislation, however, he thought would bring disunion and war, and by disunion and war national ruin would be precipitated. He was therefore ready for any practicable compromise which could preserve the Union from this terrible shock. For compromise Mr. Webster also was ready, tho for different reasons. He was not ready to compromise away wealth, for that a nation should be wealthy is a prerequisite to greatness as well as to prosperity. But he was ready to compromise away abstract principles of liberty; for to establish abstract principles of liberty a nation does not exist. Walpole thought so when he refused to

relieve the dissenters, and laughed good-humoredly at the idea of emancipating the Jamaica slaves. Cobden never could understand why there should be a discrimination in favor of sugar produced by free labor; and Sir George Cornewall Lewis, eminently the financier of the monetary school pure and simple, prophesied nothing but evil when the North undertook to maintain the Union by war. It is questionable whether any English leader of the school I now criticise has done more than express as to liberty sentiments purely speculative. The country is to be made rich and prosperous; but for mere abstractions we should not at least go to war.

One more contrast is to be noticed as significant of their respective schools. Mr. Webster was frequently called "God-like;" and there was a great deal in him that compelled intellectual admiration. When coupled, however, with submission, it was a submission like that given to the rest of his school, the submission of reason, satisfied that what he wanted would be for the benefit of those who submitted. They obeyed because they saw they would gain. But Mr. Clay's followers obeyed when they felt that in obeying they would be sacrificed. To the one was given admiring assent, or dissent often as admiring. To the other was given enthusiastic devotion and almost equally enthusiastic hate. There are many still living who, tho strangers to Mr. Clay, were overwhelmed by passionate grief at his defeats. There were few who at any time regarded Mr. Webster's defeats other than as matters of monetary loss. The one catastrophe was a personal agony to multitudes; the other was the alteration of a figure in a statistical table.

It would give but an imperfect view of the era which Von Holst treats in the volume before us did we close without dwelling for a moment on another remarkable statesman of that era. To Mr. Calhoun, Von Holst gives much study and much space, yet in no instance are his misconceptions so remarkable. To one or two of these we must pause to advert.

Mr. Calhoun's nullification theory, we are told, is virtually the same as that approved by Mr. Jefferson, in the famous resolutions of Virginia and Kentucky protesting against the Alien and Sedition laws. But this is an error. Mr. Jefferson no doubt maintained that when the federal government grossly and re-

peatedly violated the Constitution, it became the duty of the States to interpose; and the same doctrine was afterwards proclaimed, as an elementary political truth, by the legislatures of Massachusetts and Connecticut. But by Mr. Jefferson this right of "interposition" was claimed, not as a part of the law of the land, but as a revolutionary prerogative, in the same way that a similar right is claimed in the Declaration of Independence, and as there stated is universally conceded. The only justification was "repeated and enormous violations" of the Constitution, so he wrote to Mr. Nicholas contemporaneously with the proposal of the Virginia resolutions; and "these," he added, "when they occur, will be cause enough in themselves." The Alien and Sedition laws were no such justification, tho the unconstitutionality, at least, of the Alien law, was held not merely by republicans but by many federalists; and these laws were vigorously executed in Virginia without a suggestion of forcible opposition. Only the emergency of a rare crisis, such as that which inaugurated our government, would justify resistance to its laws. On the other hand, to Mr. Calhoun, possessed as he was, as soon we will see, with the idea of law operating even through the exceptions and convulsions by which at first sight it seems abrogated, gifted as he was with extraordinary administrative fertility and subtlety, nullification was not a revolution, or the result of some rare incalculable emergency, but a constitutional right to be kept in permanent exercise. It was a "local option" committed to States. The States, with this nullification prerogative, were to revolve in the Union as securely as before, just as a steam-engine is none the less safe when it has attached to it a safety-valve which first lets off and then economizes excess in steam. The free states of Germany, so argued Mr. Calhoun, were the most loyal and efficient members of the old empire, yet these free states were excepted from the imperial tariff, custom-houses limiting them on their landward and not on their seaward side. Even in England the customs of certain counties are impervious to acts of Parliament; yet no counties are more loyal than these excepted counties. A system of federal law, he held, is all the more perfect and exhaustive from the fact that it provides for autonomy on the parts of the several members of the confede-

ration, giving them liberty to accept or decline its own ordinances, and in case of their declinature providing an alternative and compensatory code. No one who knew the honesty and purity of Mr. Calhoun can doubt that, on that solemn moment when, at the height of the nullification controversy, he advanced, as Senator from South Carolina, to take the oath of allegiance to the Constitution of the United States, he regarded the Constitution to which he thus swore as expressly reserving the right of the States to nullify, at their own option, federal statutes they should consider unconstitutional. And no one who considers the extraordinary texture of his mind can be surprised that he should hold such a construction practicable. State governments, the federal government, could be made impalpable to his clear tho narrow vision; he could represent them by signs, as pure abstractions are represented by formal logicians; he could subtract one from another, he could annex and detach, he could introduce or withdraw new quantities, he could make each sign a logarithmic germ, without producing any collision among the signs he thus marshalled. Why should powers, self-working tho they be, collide, if they move according to law? And if it were necessary to construct a code which, while recognizing the "local option" of nullification, could so fence it by compensatory checks that the whole system would move in a harmony in proportion to its complication, who would be so fitted for the task as a statesman whose intrepidity shrank from no duty however venturesome or however laborious, whose dialectic powers have never been surpassed, and whose powers of administration rarely equalled?

It is by keeping in mind the dominancy of positivism in Calhoun that we can explain what are commonly regarded as inconsistencies in his remarkable career. He began his political life with a policy as imperialistic as that of Mr. Clay when they stood together in the House of Representatives during Mr. Madison's second term. Mr. Clay was Speaker of the House; Mr. Calhoun the virtual Chairman of the Committee on Foreign Affairs. It was not, however, to foreign affairs that Mr. Calhoun confined himself. It is true that an offensive campaign was to be undertaken against Canada, and that Canada was to be annexed to the United States. It is true that to the South and

West, to the Pacific and the Isthmus, the flag was to advance, until all North America was under its shelter. But this vast structure was not to be without adequate support. The measures Mr. Clay adopted as essential to the growth of the republic Mr. Calhoun urged as essential to its symmetry as a structure of laws. For this purpose, banking, internal improvements, manufactures, were to be prescribed, sustained, and limited by statute. Up to this period the law he contemplated was law for the nation as a whole. He in no way abandoned his principles, or changed his mode of thought, when he adopted, as the object for which he was to legislate, not the nation as regulating everything through Congress, but the nation as a confederation of automatic powers for each of which a new system of law was to be provided, with its checks and counter-checks. It has been well said that the theism which the doctrine of evolution supposes is one assuming far more potential and continuous resources than the theism which supposes that the divine power directly orders each separate event; since it is a far higher office of law to regulate a series of self-determining creatures, and to meet their self-determination by compensatory checks, than to work through creatures which are machines. And a system of law such as that contemplated by Mr. Calhoun in his later days bears to that of his earlier life the same relation as does law working through self-developing agents bear to law working through automata.

In view of this dominant characteristic of Mr. Calhoun, it is strange that Von Holst should regard him as the successor of Mr. Jefferson in political economy. Mr. Jefferson was an optimist, and an apostle of *laissez faire*. Mr. Calhoun was very far from being an optimist, and so far from believing that things would work right if left alone, he held that it was only by law that things could be made to work right. In his latter years, it is true, he was an advocate of free trade, as in his early career he had been an advocate of protection, but the free trade he desired to inaugurate was to be even more strictly limited by law than was the protection he took part in establishing. Each undertook to regulate, by the shifting of taxes, the industry of the land, with this difference: that to raise a revenue by excise, which free trade requires, calls for far more intricate processes of

legislation than does raising a revenue by protection. His free trade, therefore, like the local option of his nullification, was to be a system of vigorous and very complicated law. The state was to be absolute in its sphere; freedom undoubtedly, with certain classes, and under certain limits, was to obtain, but it was to be freedom coming from law, not the freedom by which law is produced. As the state is the fountain of law, so its institutions can be only altered in conformity with law. The charter government of Rhode Island when appealing to him, as Secretary of State, to sustain it against a popular revolt, found him eager to announce that until government is altered according to its own modes it is the rightful government, to be supported at all hazards, no matter how great may be the popular disapproval of its provisions. He was, in fine, a Positivist Statesman; and, like all other positivists, an absolutist, working from law downwards on the people, and not from the people upwards to law. In mental structure as well as in mental tendency he bears a striking likeness to Auguste Comte. But while at least equal to Comte in the mastery of formal logic, and in the formalization of law providing for details the most minute and contingencies the most remote, he far transcended Comte in two important qualities. Few administrators have equalled Mr. Calhoun in efficiency; for he brought to the work of administration (taking as a test the period when he was in Mr. Monroe's Cabinet as Secretary of War) not merely system but incorruptible zeal and marvellous skill. Absolutist he indeed was, as is illustrated by the inexorable rigor with which he insisted on subordination even in a general so bold, so successful, and so defiant as General Jackson; but the absolutism he sought to enforce was that not of caprice but of law. And this absolutism he did not attempt, like Comte, to extend beyond the political field. There, however, extraordinary as the paradox may seem, it was to be unchallenged. Revolution was a remedy that knew no place in his statesmanship. Nullification—secession—these were the remedies provided for by the law itself.

Are we then, with regard to Mr. Calhoun, if not as to Mr. Clay and Mr. Webster, to accept the depreciatory criticisms of Von Holst? If we have rescued Mr. Clay and Mr. Webster from the category of political adventurers acting under the im-

pulse of ambition or interest as the moment might prompt, is Mr. Calhoun to remain in that category? With an intellect, as is conceded by our German critic, surpassed, so far as concerns logical acuteness, by no public man of any era; with a character singularly pure; with courage that never flinched; with ambition no doubt lofty and vehement, but never stooping to intrigue; with powers of debate few have ever equalled; with a mastery of strong and idiomatic English; may we not say of him, isolating him as we may thus do from all that followed, that he was a statesman, erroneous as may have been his school, whose memory our country cannot but look on with pride? We must, before we negative this, turn to the school of which he was so eminent a representative, and ask whether that school has not at least in a modified shape a high place in the political structure of all free states. "Doctrinaire" Von Holst calls it, and always with an accent of contempt; "Positivist" perhaps would be its better title; but whatever be its name, it has not elsewhere been without great historical representatives in other spheres. In England, in the new school of political positivism, representatives of this class are beginning to emerge; in France, owing to the peculiar logical tendencies of French science, they have acquired an historical name. That statesmen of this school, when courageous and consistent, may bring ruin in their track recent French experience has shown. Guizot, for instance, like Mr. Calhoun, was, if we must use the term, a *doctrinaire*; like Mr. Calhoun he propounded many admirable maxims of social science; like Mr. Calhoun he erred in endeavoring to enforce these maxims by statute. Like Mr. Calhoun, Guizot was austere, pure, of haughty ambition, yet scorning intrigue and even compromise. Had he not been an absolutist as well as a *doctrinaire*, had he not insisted on making France liberal by law, France might have been liberal without a revolution, and have been endowed with a liberty which no counter-revolution could destroy. But because he was absolutist as well as *doctrinaire*; because in his case, as well as in the case of Mr. Calhoun, the effort was to establish scientific formulas in politics by legislation so complex as to work sooner or later collision—we have no right to hold that the *doctrinaire* or even the positivist school is to be exiled forever from political life. On the contrary, if a

new school, it is one likely, when properly checked, to be of great value to the state. Its unbroken supremacy would undoubtedly inflict ultimate disaster. No government can exist without compromise. It is as impossible to govern states as it is impossible to govern society by absolute scientific rules. But as social science is of great value in the suggestion of rules for the philosophical guidance of society, so political science may be of great value in the suggestion of rules for the philosophical guidance of the state. And of this school no abler and purer representative can be found than Mr. Calhoun.

The three great statesmen whose characters have just been sketched have now been nearly thirty years in their graves. They were virtually contemporaries: Mr. Calhoun and Mr. Webster born in 1782, Mr. Clay in 1777; Mr. Clay and Mr. Webster dying in 1852, Mr. Calhoun in 1850. We may say of Mr. Clay that, with all his fascination and power as a leader and an orator, he belonged to a school—the imperialistic—which, while right as to matters of national defence, is wrong when it transfers to government functions which can be best exercised by private enterprise. We may say of Mr. Webster, splendid as were his gifts as an advocate, majestic as was his personal bearing, impressive as he was as a constitutional jurist, that he belonged to a school—the monetary—no doubt of great value when viewed as one of several factors in a free government, but which in making prosperity the main object of government has a tendency to subordinate principle and honor to success. We may say of Mr. Calhoun that, despite his lofty character and his eminent intellectual gifts, he belonged to a school—the positivist—which, while contributing much to political science, must necessarily, from its inflexibility and arbitrariness, produce collisions wherever it has unchecked sway. Yet is not each of these schools, when duly modified and combined, of use in a free system, and eminently so in a country so vast and so diversified as ours? May we not conceive of a policy which may accept what is good in each of these schools and reject that which is bad?

FRANCIS WHARTON.

POPULAR EDUCATION AS A SAFEGUARD FOR POPULAR SUFFRAGE.

THE extension of suffrage in Britain under the last "Liberal" ministry was closely followed by an extension of primary education. The argument was, that the new popular element, now invested with power in the government, must be fitted for its new franchise by being made more intelligent. The ministers of the crown were reported as saying that they could not govern England by popular suffrage unless the populace were educated. In like manner, we meet perpetually, in ethical, philanthropic, and even in Christian writings, with the declaration that "Ignorance is the parent of vice" (meaning the sole parent). Americans express the same ideas: "Popular suffrage and popular education must go together." So, it is heard on all sides of the bestowal of suffrage on the Africans: "If they are to vote, then they must be educated." By this "education" is practically meant a training in literary rudiments.

One truth plainly implied in these popular propositions is: That without some safeguard, universal suffrage is liable to be abused to work injustice and calamity. This is a clear concession that this proposed remedy for unjust government, the right of all the ruled to vote for rulers, is capable of being itself perverted to oppression. The other proposition implied is that such literary culture as state-schools may make universal is the adequate safeguard against the perversion. It is upon this position that the views of the opposing parties will be dispassionately compared.

It is presumed that no party holds ignorance to be preferable, *per se*, for any human beings, over intelligence; and that none deny that ignorance is an evil, and is often an occasion of aggra-

vation to the evils which originate in other causes. Doubt only exists to this extent: whether intelligence alone is the adequate remedy. It is presumed no one denies the ignorance of voters to be dangerous to the commonwealth; the extent of the inquiry is only this: whether popular intelligence may be relied on to eliminate the peril. The sceptics here argue on the general principle that the admitted reality of a danger is not enough to lead, by the mere rule of contraries, to the adequate remedy. Famine destroys life; and yet food may be so administered to the famished as to hasten their death. To the safe exercise of power two conditions are essential. One is sufficient intelligence, and the other is righteous purpose. Ignorance in those who rule is a great evil, because it makes the unrighteousness of purpose blindly aggressive. Yet something else than the diffusion of intelligence may be necessary to remove the unrighteous purpose; and it may even be that if this remains, increased intelligence will arm it with deeper powers of mischief. On the other hand, it appears almost self-evident to multitudes of our people that the diffusion of intelligence is the obvious and the adequate remedy. They hold that the purpose to act wrongfully proceeds from thinking erroneously. "Ignorance is the parent of vice;" and therefore, it is self-evident, knowledge is the remedy; for ignorance and knowledge are the obvious opposites. In other words, the philosophy of this party in our Christian country is that which Plato imputes to Socrates: the key-note of whose inculcation was that any soul may be imbued with virtue by didactic instruction; or, that right thinking is the sufficient and sure condition of right acting. Which of these rival views is true? Or are they both half-truths, dangerous from their confusion of partial truth and error?

I. To reach an answer to this question, the first requisite appears to be that we shall perceive how, and from what cause, the dangers of the perversion of popular suffrage are to grow. This will be best seen by retracing a few of the admitted rudiments of the science of government.

Civil government is founded on the will and ordination of the Creator. These he makes known to his believing servants in Revelation; and to the reason of mankind in certain necessities of their nature and facts in their exist-

ence. Of these, one is that man must be and is a social being. For social life he was created; and its conditions are necessary for his proper development and happiness, not to say to his very existence. Consequently God constituted man a sympathetic and social creature. But man has also personal and self-interested principles; and the general law is *that these are far stronger than the social*. The importance of this law is not weakened by the fact that a few extraordinary persons are wholly disinterested, and that the immediate domestic and especially the parental affections tend towards impersonal actions. The general case, for which political philosophy must provide, is this: that in society the personal or self-interested principles override the social. Now, out of these two facts emerges the necessity for civil government. Men cannot exist apart. But when they come together, the principles of self-interest, which always dominate over the social, tend constantly to aggression upon their fellows. Government is, in its simplest idea, the forcible restraint which is necessary to curb this tendency. Without this, man's social existence would be a perpetual competition of individuals against their fellows for personal advantage, tending to anarchy and a universal violence which would break up social existence and either destroy life or drive men again into solitude. This result, without restraint, would follow in large degree, tho man were actuated by no principles of self-interest except the natural ones. But the case is greatly strengthened by that fact which observation should teach us, without Bibles: that all men are naturally depraved. Man's natural will is not only more inclined to personal than impersonal ends, but it is also unjust. Thus man in society is prone to yet more mischievous and wicked aggressions on the social order, amidst which he is yet ordained to exist. Civil government is the necessary restraining power upon this perpetual tendency.

But plainly: civil government cannot be an abstraction, executing itself; neither can it find superhuman beings to administer it. The power of restraint must be committed to human beings. But in these governing human beings, also, the personal principles are stronger than the impersonal. Hence the general tendency will be for them to use, for unjust aggressions on their

fellows, the power of control entrusted to them to prevent such aggression. The additional power of rule annexed to their own individual powers only enables them the more for the unjust engrossing of others' rights to their own gratifications. Thus the remedy, unavoidable as it is, reverts to the disease! Experience tells just this story in all history: that while government suppresses the anarchy of rival, private wills, it introduces in its place the unjust tyranny of the ruler's will over the ruled. As men felt this, they learned their first lesson in the science of government. Suffrage seemed to be the obvious expedient for obviating this peril. Let the ruled elect the rulers, so that the rulers shall derive their powers from, and return them to, the ruled, at stated times; and it was hoped that this danger would be precluded.

But experience soon dashed this hope also; for the most radically democratic commonwealths were found to be far from the most justly governed. Whence this disappointment? When the answer to this question is reached we shall have the central truth which solves our inquiries. It was found that, tho every citizen were made an equal voter and equal to the candidates also in eligibility, still all could never have, or think they had, identical interests; and there must ever be wide natural differences of natural strength, talent, appetencies, and will. Hence it was possible that a line of governmental policy could be made to press differently upon individual interests. Any one line of action which was specially promotive of the personal interests of one class of citizens must be, for that very reason, adverse to the different interests of another class. In every country, climates and other geographical causes force some parts to pursue different industries from other parts. Or, if the country were so small as to be absolutely uniform in its industrial conditions, still native differences of powers, tastes, and wishes, must dictate to different people a preference for different pursuits. Or if, by some miracle, every man's heart were made exactly like every other's, the necessity of raising and disbursing taxes must still generate an inevitable difference of interests, that of the tax-payers and the tax-expenders. Even if taxation, the only equitable way to provide the cost of a government, were distributed with absolute equity upon rulers and

ruled, still the ruled cannot equally share with the rulers the power of disbursement. Whence it must ever follow that there will be here two classes with clashing personal interests.

Hence, in a freely elective government, sameness of interests and unanimity of wishes must be forever impossible. But there is no other practicable rule for electing than that the majority must prevail. Now, let it be supposed that the theoretic power of the electors over the elected were not in the least interrupted, or obstructed, or swayed by any arts of faction, *caucus*, press, or demagog, the *utmost and most accurate result of suffrage would be*: that *the elected, in ruling, would exactly reflect and reproduce the wishes of the dominant majority of electors*. That would be all. In fact, suffrage never gains so much; because the arts of those who manipulate it always pervert it, in large measure, so that the majority of electors is really but the tool of a designing, or more acute, or more active minority; and it is only the aggregate personal wills of this minority which are virtually reflected in the administration. Let this fact be added: that as political experience is gained and mental intelligence diffused, a perception of ways in which the government's action can be made to promote or injure classes of private interests is acquired by classes of citizens. Possible combinations for advancing some interests, to the detriment of others, are thought out. Thus, the same law of nature with which we set out reappears: that the personal and self-interested principles of men are stronger than the impersonal and equitable principles. The same problem confronts us. Our first experiment in constructing a government, that of the one-man power, gave us, in place of the anarchical despotism of individual aggressions, the despotism of the monarch. Our second, that of free suffrage, gives us, in place of the oppressions of a tyrant, the despotism of the majority over the minority—or, more probably, of the shrewd oligarchy who wield the majority over both them and the minority.

And here, interposes every intelligent reader, appears the necessity of constitutional stipulations or limitations, protecting the rights of minorities and regulating the mode and limits within which the majority shall govern. Not any preference of any major number shall be the righteous law for all; but in the im-

mortal words of the Scotch freemen of the seventeenth century, *Rex Lex*. The Constitution is the king. For it is simply childish to demur to the mere arbitrary will of one human being, because he is a selfish and fallen being and thus ever prone to injustice; and then accept the mere will of an aggregate of just such beings. For if the natural traits of the sinner who is made a monarch incline him to injustice, the same traits in each individual of the majority made a monarch will cause a far stronger tendency to injustice, because it is an invariable rule of human nature that *it feels less responsible to conscience in associated than in individual acts*. It always yields, more or less, to the temptation to view the responsibility as distributed out, divided among the multitude, and thus diminished. From these results no reflecting man dissents; but thus far all sides agree. Thus the problem again recurs: how shall power to control the unjust, personal principles of man be trusted to man, and not be liable to abuse?

It is equally obvious to all sides that as we found civil government could not be an abstraction executing itself, so these constitutional limitations would be a mockery if they were left a mere abstraction, self-executive against the encroaching ruling power. To curb power, they must be somehow imbued with power. How shall these protecting safeguards be reinforced so as to become practical? The answer has taken three shapes. One plan has been to arm the restraining safeguards with protective energy, by so distributing the actual forces of government between the different parts of the commonwealth that while capable of combining for good to the whole, they shall lack the ability, or the motive, to combine for the unconstitutional oppression of a part. By this happy expedient the very principles of human nature which we dread as prompters of aggression are enlisted as preventives of aggression. All the functions of rule are not aggregated in the hand of one class, even tho that be the most numerous; but they are distributed between different representative centres, each of which is armed by law not only with the abstract title but the practical forces for defending its own legitimate functions. And it is from this expedient, in one or another form, that all the regulated liberty which has been known in history has proceeded. In the

Roman commonwealth powers were distributed between the annual consuls, the senate, and the *plebs*, who were armed with its tribunitial *veto*; and as long as that constitution was maintained in actual "working order" Rome was free and prosperous. So, in Great Britain the powers were divided between king, Lords, and Commons. From William and Mary until this day Britain has enjoyed a longer period of true liberty with order than any modern people. But just so soon as the distributed powers of the European governments were engrossed in one centre, it mattered not which, despotism was the immediate result. Thus, the French Republic of 1790 professed to be founded on the freest basis of "liberty, equality, and fraternity." But as soon as the French National Convention had engrossed to itself all the functions of state, France had the most wicked, despotic, and worthless, as well as the most corrupt government on earth. Its diabolical tyranny and outrages on equal rights actually surpassed those of Louis XIV. when he was able to say *L'état, c'est moi*, by absorbing into his monarchical hand the former feudal rights of the nobles and political and judicial rights of the parliaments of the provinces.

Another expedient for solving the difficulty of just government is to imbue the minds of those entrusted with power with justice, benevolence, and virtue; or, in other words, to rely on moral power to curb the tendency of human nature to forcible injustice. This was one of the chief expedients urged by the Father of his Country in his "Farewell Address." So far as it is available it is excellent. But since man is a morally fallen creature; and since the state as an organism is equipped with no agencies for sanctification, its ability of self-help in this direction must be very limited. Hence Washington, after pointing to moral restraints as the best foundation for liberty, correctly pointed to the *Christian religion* as the chief source of moral restraint. The old adage says: "If a man wishes to thrive, he must ask his wife." So, if the commonwealth desires to possess this safeguard of moral power for the liberties of the people, it must look chiefly to its equal and ally, Christianity, to propagate it for them. But in this the simile does not hold: the state must not marry Christianity, lest it should paralyze it; but must leave it to help it as an independent friend.

The third reliance for solving the problem of just government in human hands is the mental culture of all the voters. Their expedient is: Let the state itself undertake the work of giving the rudiments of mental culture to all the people, and their intelligence will ensure their using suffrage safely. In other words, their remedy is dictated by taking the dangerous half-truth, "Ignorance the source of vice," as a whole truth. In the light of the examination made above, their reliance on this expedient is obviously the same as the assertion of this proposition: *Sufficient knowledge will render the selfishness natural to man unselfish in its associated actions.* For, as we saw, it was man's natural selfishness which necessitated civil government. But free government is only power wielded by men associated.

Reflecting men would hardly deem this proposition, on which the third expedient is really grounded, either tenable or debatable (viz., that sufficient knowledge will render the selfishness natural to man unselfish in his associated actions), did they not tacitly mingle with it the second expedient. Moral discipline, so far as it can be applied efficiently, is a valuable remedy for this tendency; and thus a real solution for this great problem. But, as was pointed out in this REVIEW in a previous essay ("Secularized Education"), it is exceedingly hard to eliminate the moral from the mental discipline. The soul is a monad, and cannot be cultivated or nurtured by patches. In this respect it is a fortunate thing that this is so. Let education be in theory secularized, yet it is almost impossible to communicate secular knowledge without both teaching theological ideas and wielding moral control. This mixture of the Christian and moral discipline, in what is heedlessly called mental culture, is the thing that misleads the extreme advocates of the half-truths, and causes them to suppose that they see, in simple training of the intelligence, a remedy for the tendencies of natural selfishness and injustice. But, in order to a just discussion of the several theories, the different elements of moral discipline and mere mental culture should be viewed apart. Let the question then be entertained for a moment: How much would mental culture do if it were, or could be, conferred alone, as a safeguard for suffrage? Is there any justice

whatever in this Socratic yet pagan theory that social vices are removed and virtues are propagated by simple inculcation of knowledge?

The fairest, because the most general and scientific, mode to test this extreme opinion is to examine the relation of knowledge to volition and desire, in the fundamental law of human action. Sound psychology settles these propositions. Man is a rational free agent. Every soul has, in addition to the powers of cognition, appetency, and choice, some natural disposition. This natural disposition expresses itself in the desires and consequent volitions, and thus discloses itself as the regulative principle of them. The object to which the soul moves is never the efficient, but only the occasion of its activities of desire and choice: otherwise the man would not be a free agent: the efficient of his action is his own subjective and spontaneous appetency, moving from within outwards, according to the regulation of his own native disposition. These are simply results of experience and facts of consciousness, which need no argument with such readers as those of this journal. It follows from them that neither is cognition the efficient, but only the normal occasion of free action; because all that cognition does in the case is to set the object before the soul in the aspect of the actual or the real. But does that soul view that object also in the aspect of the desirable? Here is the hinge of the whole question! Notoriously, not every object viewed in the intelligence as in the aspect of the real is desirable to man: some objects are, some are not. Bread is desirable to man's animal, and applause to his mental, appetency; grass and ridicule are not. But now, what is it in man that determines that to eat grass or to be ridiculed is not and cannot be desirable to this man? Is it his cognition of them or of the mode of their attainment? Is it any degree of clearness in that cognition? Obviously not; but there is something original in the man which has potentially determined, in advance of cognition, that the ideas of eating grass or being ridiculed shall never be the desirable, for their own sake, to that man, however clearly thought. That something is, indisputably, *disposition*. Whether a given object, when presented as real in the intelligence, shall

be felt as desirable: this is determined *a priori* by the nature of the soul's disposition. Hence it is obvious that no presentation of an undesired object in the intelligence—which is just what cognition does—can reverse or modify the regulative disposition. The effect cannot reverse its own cause. It is the native disposition which has already determined that this object shall be undesired. This native disposition is as ultimate and fundamental a fact of man's constitution as the intelligence itself, and is coördinate therewith. But does not man feel as he sees? Yes; cognition is the necessary condition of his feeling; but it is disposition which determines how he shall feel towards the object seen.

The application of this psychology to the question whether sufficient knowledge will infuse civic virtues is made by this assertion: That the personal and self-interested affections, together with their ordinary preponderance over the disinterested affections, are natural to man. *They are of that native disposition* which is regulative of appetencies and volitions. This, sound observation proves by all the *criteria* by which any original disposition can be ascertained. This preponderating selfishness is the common trait of natural men in all ages and countries. It develops itself from the beginning of their lives. It molds their average conduct. In a word, every practical man knows that it is as natural to man to love himself better than his neighbor as it is to fear pain or to dislike being laughed at. This being so, it appears as unreasonable to expect selfishness to be conquered by mere increase of knowledge in the intellect as to expect a man's natural revulsion to pain to be revolutionized by studying pathology.

The abstract argument is greatly strengthened by the experimental. If we look at the influence of mere mental culture on individuals devoid of morals, we do not usually see these persons grow better with their attainments. Such authors and artists are by no means famous for morals superior to their fellow-men. The cultivation of the taste is not found to rectify the heart. The morality of seats of learning is rarely so good as that of the classes of society which furnish their occupants. No business man accepts the mere mental culture of his *employé* as the essential guarantee of his fidelity: were one to tell the

shrewd banker that his cashier might be safely trusted because he was well posted in physics and algebra, he would resent it as a mocking of him. This rapid enumeration shows that sensible men recognize no causal tie between mere mental culture and integrity. If we look at aggregates of men, we find that the cultivated Greeks were confessedly more immoral than those whom they called "barbarians." The fall of Athenian liberty came soon after the splendid meridian of her art and literature. Close after Pericles came Cleon, the murder of Socrates, and the Macedonian subjugation. Egypt, the schoolmistress of Greece and the old world, became "the basest of the kingdoms." The "Augustan age" of Rome was also the age of the fall of the republic, and the military despotism. These instances may be thought irrelevant, because in all the ancient commonwealths, however free in name, far the larger number of persons was disfranchised. The political *populus* was a small minority, and, however cultivated, was underlaid by an uneducated mass. But this ignorant body was without power or influence in the government. The fact then remains that ancient liberty was ruined, in each case, in the hands of the educated.

But recent history is more instructive, because it offers us illustrious experiments of popular education, carried for two generations as far as it is ever likely to be carried. Our overweening hopes of good from mere mental culture are much curtailed by observing that the condition of Christendom was never more ominous and feverish than it now is, after these efforts at education. Military preparations were never so immense, or so onerous to the national industry. The spirit of war was once ascribed to the ambition of kings, regardless of the blood of their peace-loving subjects. But we now see that since the instructed peoples have acquired influence in the governments of Europe, this fell passion is more rife than ever. It seems, moreover, that the German nation, the most educated one of all, is in as unstable a condition as the rest. The wildest political heresies prevail; and these rulers, the special and boasted exemplars of popular education, rely least on popular intelligence, and most on the sword, to save society from destruction. Intelligent men there dismiss the idea with ridicule that any actual diffusion of intelligence among the peasantry, by the schools, is the real safe-

guard of their universal suffrage. They tell us that not one in three exercises his accomplishment of reading, when an adult—a statement which the scanty circulation of newspapers among them confirms. They say that the primary schools are useful chiefly as *a drill in obedience*. They teach the child early to submit to superiors, to move at the sound of a bell, to endure tasks, to fear penalties, to study punctuality, at the command of others. Then comes the conscription, and seven years' drill in arms, to confirm the habit of submission. Thus the German system produces a peasant who is in the habit of voting as the upper classes bid him; not of thinking for himself! It is presumed that this picture of the virtues of the system is not very flattering to our American hopes.

The extremists who seek to deprecate to the utmost mere mental training as a source of virtuous civic action even claim experimental arguments from American history, which, if not sound, are yet plausible. They remind us that in these States the educated classes have usually been as wide apart in political convictions as the uneducated; and this result seems to show that mental culture has no regular connection with right thinking about politics. They say that the demagoggs again, whom every enlightened patriot dreads more than he does the mob, are usually from the educated, or at least the shrewd, active-minded, and self-educated classes. They point to the great newspapers, which in fact represent the prevalent political literature and mental activity of the American people, and they ask, What political heresy which has ever plagued the country has not been confidently advocated in this newspaper press? And from these assertions they draw the inference that there is no causal tie between mental activity and civic virtues. They also propose to test the moral effects of mere mental culture by examining its control over individual conduct as disclosed by the statistics of crime. We claim such statistics as in favor of our system of popular instruction, because it is reported to us that the large majority of criminals are illiterate. But they reply that this is not a trustworthy mode of making a comparison; because hitherto letters have been the accompaniment of reputable and pious domestic surroundings and easy circumstances; while illiteracy has been the usual accompaniment of degraded

and destitute circumstances. And they claim that the prevalence of crime is produced by the want and degradation hitherto associated with illiteracy, and the comparative virtue by the comforts and decencies hitherto connected with letters: not by the mental culture itself. They say that, were popular education made really universal, the idea that mere letters diminished vice would be exploded by our finding a larger percentage of crime in the whole community, other things being equal, than before. And such, they exclaim, is already the mortifying result; as is visible to the eye of the traveller in America. Where the State-school system is in its infancy, as is evinced by the sparseness and humility of the school buildings and the poverty of the endowments, the jails, penitentiaries, and almshouses are few and small. But when the observer begins to admire the magnificent endowments and palatial buildings of the public schools, he is also struck with the number and vastness of the prisons. The two kinds of structures seem to flourish together.

Experience thus confirms reasoning, in moderating our hopes of result from the mere enlargement of knowledge. Man's disposition, including his overweening personal affections, is as original and fundamental as his faculty of intelligence. Hence this disposition determines, by its *a priori* force, that disinterested actions, however known in the intelligence, shall not be so attractive to the human heart in the general as personal actions. Increase of knowledge then has no more efficiency, *per se*, to change this inclination than would a flood of light thrown on an object intrinsically repulsive to a man's taste, to make that object beautiful to him. The natural man does not postpone the disinterested virtues merely because he misconceives them. He does it, correctly appreciating them and self-interest in their essential nature, because his nature is selfish.

But it is pleaded that knowledge may curb the unjust passions by presenting, as a better alternative, enlightened self-interest. This wider intelligence may not make natural selfishness unselfish in its associated actions, but it is hoped it may show men that equity is the most enlightened self-interest. Again, experience answers that this hope usually fails whenever a strong temptation to unjust but self-interested action arises.

The thoughtful observer is not surprised at this failure, when he considers that the principle cultivated by this plan is still selfish. What is it but to expect selfishness to cure selfishness? The popular remark that "enlightened self-interest is a curb on passion" involves this mistake: It implies that self-interest is not in its nature a passionate but a rational principle, and thus opposite to the passionate. But why does any object engage man's self-interest? Because it gratifies some passion! Be it, for instance, money: this only enlists self-interest because it is the object of the passion of avarice. Our passions are the animating souls of our interests. He who acts from the most steady and clear-sighted self-interest is the very man who is governed by the most intensified passion. So, again, the mistake appears of relying on passion as the cure for passion. The most likely result of such enlarged intelligence will be that the self-interested affections will only employ it to devise more indirect and astute means of unjust advantage, more injurious to others' rights than the simple aggressions of the ignorant man, as they are more extensive.

In the light of these views, the overweening value sometimes attached to mere knowledge, apart from moral training, as the efficient of man's civic elevation, is sufficiently exploded. But when mental culture is put in its proper place, as the ally and handmaid of moral culture, there are still several facts which cannot but moderate our expectations from it, while they will not cause us to deny its value. We have seen that the problem on our hands is: How to make man, naturally selfish in his personal, unselfish in his associated actions. But we have shown that he is far more likely to yield to unjust selfishness, in the latter class of acts; because his responsibility is apparently so divided and concealed among the numbers. For instance: a little reflection will show any man that if he buys the manufacturer's calico for silver coins really worth but ninety cents on the dollar and sells it for a par currency, he is wronging his fellows precisely as though he had cut one ninth from his yardstick when he sold. Few men are prepared to use false measures in selling; but multitudes were willing to clamor for the "silver bill." Men who would not steal from a creditor yet demand from the government a depreciation of the currency in

which they hope to pay that creditor. Britain probably contains more truly honest and Christian persons than any other country ; and yet its government practises the most flagrant wrongs, such as the opium trade with China, and the annexations in South Africa. There is not a nation in Europe which does not deal with its neighbors in international affairs on principles of suspicion, violence, and injustice which the average private citizen of those governments would blush to imitate in his own acts. The work to be done to secure just associated action is, then, a peculiarly arduous one.

It must be remembered that the civic affairs of the great industrial nations become exceedingly complicated. The interests of classes are exceedingly diversified. Legislation touches these interests in most intricate and unforeseen ways. Hence it is obvious that a very wide and mature knowledge is needed to judge public measures equitably and wisely. It needs no words to show that the popular discussions of such a government offer an almost boundless field for the plausible ventilation of those sciolisms and half-truths which are so seductive to the shallow scholar, and yet so perilous. How thorough and profound ought the popular education to be in order to qualify each voter under universal suffrage to judge independently and wisely for himself ! Every man would need to be a profound statesman ! But can we hope to communicate this breadth of culture to all, and also to cause them to retain and employ it during their toiling existence ?

But if the voter cannot judge for himself, and yet votes, then he is the prey of the demagog, that fated curse of all popular governments. The greed and selfishness of human nature will always ensure the presence of men who will plan to use free suffrage as a tool for their own unjust ends. "Where-soever the carcass is, there the eagles will gather together." Now, it must be remembered that in the demagog we often have to meet not ignorant, low cunning only, but the highest subtlety, armed with the most extensive knowledge. Can popular education so furnish with statesmanship and knowledge the laboring man who votes as to fit him to cope with the accomplished demagog who aims to use him as a tool to destroy liberty ? Can it fit him even to listen, as an intelligent umpire, to the

debate in which the accomplished and true statesman unmasks the sophistries of this accomplished demagog? But if this laborer is to vote safely, it would seem that this is the least attainment he ought to have.

In the face of this requirement we now ask, How much knowledge can popular education confer on the masses? All that is usually attempted is to give the rudiments. The result, if realized, would be chiefly to put the voter in the way of reading the journals of the country and a few other works of ephemeral nature. But a more serious question is, How much of this culture can we make the laboring voter retain? We have seen that the Germans testify that altho every child there is taught to read, only one adult in three retains or uses his accomplishment! The causes of this disappointment are patent. Civilization means, first, a great deal of labor, and, second, great aggregations of capital, with extreme contrasts of condition between capitalist and laborer, with a keen struggle for existence for the larger part of the people. Now ordinary men are not usually energetic in two independent directions. The motive power is not sufficient to drive two sets of machinery. Men of capital energies present rare exceptions; but the rule is that those who are addicted to manual labor are not active in any other sphere of exertion. The average man who spends the day in work for his daily bread, sleeps or lounges at night. This law sealed the fate of the "manual-labor schools," which were expected to do so much for the classical education of the poor. The students could not both work in earnest and study in earnest. But it may be argued that our wonderful progress in physical science will soon make a few hours' work, by the aid of machinery, earn a day's living. Thus the laborer will have leisure for reading. There is a cause in human nature which will always and infallibly disappoint this hope. Desire always outruns the means of attainment. If the laborer earns in five hours what his father got by twelve hours' toil, he and his family will speedily come to regard additional indulgences as "necessaries of life," so as to require again the twelve hours' labor. The capitalist will think, now that profits on every hour are larger, that it is far more intolerable to have his machinery stand idle and rusting nineteen hours per day. He will bribe

the operative to fullest work. It will be precisely the provident, the industrious, who will be thus stimulated to continuous labor and larger gains. It will be the listless and idle who will stop with the five hours' work. But these will be the very men to spend the rest of the day, not in study, but at the bowling-alley and tavern.

Once more: if education is to be the safeguard of suffrage, who is to be the safeguard of education? The popular theory answers, No other than the civil magistrate. For if the direction is given to any other, that other director may so shape education as to injure the commonwealth. This is precisely the argument which is to-day prompting Belgium and France to secularize education. For they have learned that if the Jesuits direct it, it will work wholly against free suffrage and free government. But we have seen that this is precisely the weak point in our theory of government by suffrage: that as "the majority must rule," the danger is the civil magistrates will represent the majority and not the commonwealth. And the safeguard against that danger we propose to entrust to those civil magistrates! This is very much as tho we should build folds for our sheep for fear of the wolves, and then appoint the wolves to keep the doors of the folds. To repeat: It is the selfishness of human nature which necessitates government. But the same human nature must ever tempt the men who are entrusted with the governing powers to use them selfishly instead of equitably. The very heart of the problem of free government is here: How to trust to fallible men enough power to govern, and yet prevent its perversion. The theory we discuss proposes popular education as the check. What is it we need to check? Our elected rulers' possible selfishness. Then we put into those rulers' hands the control of the check itself. But the very selfishness in them which makes them dangerous will be just as certain to prompt them to pervert the proposed check as to pervert any other public power. The plan moves in a vicious circle. There will be an ever-present temptation to use the schools as a *propaganda* for the rulers' partisan opinions instead of useful knowledge and virtue. The ultimate result of this tendency, if unchecked, would be, in the second generation, to extinguish utterly the wholesome competition of a rival

party,—the very condition of free government,—and to realize a Chinese civilization.

Such are the deductions which must be made, from our expectations of security in popular education, against the dangers of universal suffrage. They do not imply that education is valueless, or that ignorance is preferable. The drawbacks are not found in the worthlessness of true education, but in the objective difficulties which it has to meet. The good ship is not to be slandered because it has to buffet perilous storms and head-winds. Yet when we freight our fortunes in it, we shall be wise to take into account the tempests and gales it must meet.

Let the reader be again entreated to weigh this argument, not as an argument against true education, or against its great value as a political safeguard, but as a refutation of the claim that mere intelligence is the efficient of civic and social virtues. This dangerous half-truth, openly advanced by some, is heedlessly accepted by many. They claim for this partial culture, misnamed 'education,' the honors which can only be challenged for true, moral discipline. Education is the nurture of the whole spirit, as a whole. This point is demonstrated in an essay against "secularized education" in the number of this REVIEW for September, 1879. No true education of the faculties of the intelligence can be given without involving the discipline of the conscience and affections. And in this complex process the mental culture is ancillary to the moral; from this subordinate ministry to the moral it derives all the value it can ever have as a means of propagating virtue. The primary education of Scotland, Germany, and America has doubtless been of advantage to these nations. It is because it has fortunately always been essentially a moral discipline. One of the arguments against a secularized education was that it is practically impossible; that religion, morals, and knowledge are inseparable. It is because this has been true hitherto that all the efforts to educate the people have done good. But could education be really and truly secularized, then it would become as utterly disappointing, as a safeguard for free government, as the most gloomy extremists, who have been heard in the previous pages, represent it. And just in degree as Christianity, the only mother of sound morals, shall

be eliminated from the state education, in that degree will the results approach that futility.

This discussion explains why it is that popular education has been useful just in proportion as it was grounded on the Scriptures. The Bible is, for the laboring masses, pre-eminent as an instrument of culture, as it is as the instrument of redemption. With them mere literary interests must ever be feeble. They may have sufficient piquancy to interest the genteel leisure of the rich. There are also, among the laboring classes, a few extraordinary minds who are strongly bent to literary pursuits by idiosyncrasy or native vigor. But to the average working-man, materialized in his ideas by all his surroundings, and bound by the needs of existence to daily toil, letters must ever be too weak an attraction to be heartily used for self-culture. The grand advantage of Bible-truth for this end is that while it is a system of truth, an ethic, a theology, a philosophy, a history, an epic, and that the noblest, and thus a more manifold implement of culture than any one human science, it also meets and grasps, as a system of redemption, the master-principles of all souls. It answers the deepest want. It stirs the most deathless affections. It solves those questions of duty, trial, and destiny, which at some time assume the foremost place in every soul not utterly stolid. Hence it is that Christian duty and redemption, draped as they are in the most moving history and poetry on earth, energize the torpid soul, which is stirred to true activity by nothing else. The best hope, therefore, to have the great toiling masses readers of anything good would be to have them Bible-readers. Unless this *primum mobile* of mental activity be applied they are not likely to retain any. Here was the wisdom of Knox in his scheme of universal popular education, and hence his transcendent success, that he made the Bible and Catechism the universal text-books. Other rulers have taught all the children of their land to read; no other ever succeeded, so nearly as Knox did, in rearing a people who actually continued to read after they became men. Among no peasantry in Europe has the actual taste for and practice of reading been so nearly universal as among the Scotch. It was because Christianity was the *stimulus* of the national mind, and the Bible was the text-book. It is the only mental interest

which can maintain the competition with material wants in the sons of toil. Their recreation, if literary, will be in this, or else it will be in animal repose, or sensuality. Even when a heretical religion, like the Mohammedan, makes its sacred books the textbooks of popular education, it impresses a far higher mental activity than their other unwholesome conditions would ever produce.

One other lesson should be derived from this discussion. It is suggested by the question, Can a nation living under a free government secure its own future by any means or expedients whatsoever to be employed by the government? To many an eager mind this question causes only astonishment and offence; he answers hotly in the affirmative. His boast is that a great people is master of its own destiny. How often has he not heard it eloquently proclaimed from the hustings and the Fourth-of-July platform that if the people are true to their free principles they are invincible? There is a sense in which this is true; but it is not the sense of this boast. Both the Scriptures and history teach us that nations have not their destinies in their own hands; neither are there any statesmen or institutions on this earth that can assure them absolutely. God says: "Lift not up your horn on high: speak not with a stiff neck. For promotion cometh neither from the east, nor from the west, nor from the south. But God is the Judge: he putteth down one and setteth up another." There is no human wisdom, power, nor virtue great enough to control the complicated and mighty issues of a nation's destiny: It is one of the exclusive prerogatives of divine Providence. It is a task beyond the power of teachers, rulers, congresses, and constitution-makers. It is true that this Sovereign Providence treats nations as corporate personalities, holds them responsible, and rewards and punishes according to justice. It is from this source, and from this alone, that we can infer the nation which is true to his righteous precepts will receive the reward of prosperity from his judgments, and in that sense can assure its welfare by being true to itself. The divine rule is, "It is RIGHTEOUSNESS which exalteth a nation." Some are so overweening as to suppose that they can do it by literature. But mere knowledge cannot take the place of righteousness. God will not permit himself to be thus refuted. And if

even his own church is unable, in its own strength, to sanctify a single soul, but is dependent on the dispensation of sovereign grace, still less can the state, a mere world-power, propagate true righteousness. When God bestows the conditions of national freedom and greatness, he works as a sovereign, and men, with their plans, are but instruments in his hand. Nor are the legislator and the office-holder usually important instruments: they do not direct the current of destiny, but are rather the straws floating with it. The efficient instruments are "men whose hearts God hath touched," the great elaborators of vitalizing truths—the Gospel—and the godly parents of the land.

Must magistrates, then, stand idle like fatalists, awaiting God's sovereign dispensation of weal or woe? By no means. God does not work without means. And the most effectual way for the government "to educate the people" in the interests of national prosperity is to make every official act a lesson in straightforward righteousness. Thus the tremendous influence of the government's example is directed to inculcate the valuable lessons. But if that influence teaches dishonesty, all the book-lessons of all the State schools in the broad land will be too weak to correct it.

Prophecy assures us that God is shaping the fortunes of empires with supreme reference to the spread of Messiah's kingdom. Here is another truth which politicians will probably hear as disdainfully as the proposition that no people is master of its own destiny. They little think that a secret but omnipotent hand is making all their mighty policies subservient to that spiritual dominion of the despised Nazarene which they scarcely deign to remember. But doubtless the Almighty intends to teach men both truths effectually; and it may be done at the cost of destroying many admired theories of worldly wisdom.

ROBERT L. DABNEY.

POETIC STYLE WITH SPECIAL REFERENCE TO MODERN ENGLISH POETRY

“MANNER,” said Sir James Mackintosh, “is the constant transpiration of character.” And what manner is to character and conduct, style is to thought and sentiment, when these are expressed in literature. We all know what is meant by saying that a man has a good manner, and we know, too, in some measure how he has come by it. It implies first that there exist in his nature qualities which are admirable, dispositions which are lovable, and next that to these has been superadded courtesy, or the gift of expressing naturally and felicitously the qualities that are within him. Where these dispositions exist, what is needed is that a man during his pliable youth should have lived in good society. And by good society we mean not what the world often calls such, but society where character is true and genuine, where the moral tone is high and the manners are cultivated and refined. It is, of course, possible, and we often see it, that a man may have good outward manners covering a nature which is intrinsically mean. He may have adopted the external economy of manners which rightly belongs to genuine worth, and he may wear these as a veneer over what is really a coarse and ignoble nature. And if the polish has been skilfully put on, it requires a practised eye to detect the deception, but in time it is detected.

All this may be transferred from character and social life to literature and its works. A man reveals himself—what he really is, in many ways—by his countenance, by his voice, by his gait, and not least by the style in which he writes. This last, tho a more conscious and deliberate, is as genuine an expression of himself as anything else that he does.

All literature necessarily implies style, for style is the reflection of the writer's personality, and literature is before all things personal. In this indeed lies the distinction between literature and science, as Dr. Newman has pointed out. "Science," he says, "has to do with things, literature with thoughts; science is universal, literature is personal; science uses words merely as symbols (and by employing symbols can often dispense with words); but literature uses language in its full compass, as including phraseology, idiom, style, composition, rhythm, eloquence, and whatever other qualities are included in it." In all literature which is genuine the substance or matter is not one thing, and the style another; they are inseparable. The style is not something superadded from without, as we may make a wooden house and then paint it; but it is breathed from within, and is instinct with the personality of the writer. It expresses not abstract conceptions, pure and colorless, but thoughts and things as these are seen by some individual mind, colored with all the views, associations, memories, and emotions which belong to that mind.

When it is said that one of the chief merits of a style is that it should be natural, some are apt to fancy that this means that it should be wholly effortless and unconscious. But a little thought will show that this cannot be. Composition by its very nature implies set purpose, endeavor, some measure of pains-taking. A few sentences, a few verses, may be struck off in the first heat of impulse. But no continuous essay, no long poem of any merit, can be composed by mere improvisation, or without effort more or less sustained. There are indeed thoughts so simple that they can be communicated in a style differing little from good conversation, in a few short, transparent sentences. There are other subjects so deep and complex, ideas so novel and abstruse, that the most finished writer cannot express without much labor, without often retouching his phrases, often recasting his whole mode of expression, ere he can place in a lucid and adequate way before the mind of his readers the vision that fills his own. But the result of such elaboration may at last bear the charm of naturalness as much as the easiest, most spontaneous utterance. To use effort and yet to do so, preserving truth and naturalness is the main difficulty in all

composition. To be able to be natural yet artistic, it is this which distinguishes true literary genius.

What has just been said is true of all literature, prose as well as poetry. But it applies pre-eminently to poetry, inasmuch as all poetry worthy of the name is "more intense in meaning, and more concise in style," than prose. If in all real literature the writer's personality makes itself felt, more especially is this true in poetry. Not that the poet necessarily speaks of himself or his own feelings, but even in epic narrative and dramatic representation the personal qualities that are in him are sure to shine through. Some one has defined religion as morality touched with emotion. Much more truly might poetry be said to be thought touched with imagination and emotion. It is the presence of these two elements, imagination and emotion, informing the poet's thought,—elements which are essentially personal,—that gives to poetry its chief attraction, adds to its elevation, intensity, penetrating power. If their personality is even more characteristic of poetry than of prose, if poetry is thought and feeling in their intensest, most condensed power, this implies that style is more essential to poetry than to prose. But what do we mean by style? Mr. Matthew Arnold, that admirable critic, by whom, when he speaks of these things whether we always agree with him or not, we are always instructed, has told us very emphatically what he means by style. "Style," he says, "in my sense of the word, is a peculiar recasting and hightening, under a certain spiritual excitement, a certain pressure of emotion, of what a man has to say, in such a manner as to add dignity and distinction to it." Again he says, "Power of style, properly so called, as manifested in masters of style, like Dante and Milton in poetry, Cicero, Bossuet, and Bolingbroke in prose, has for its characteristic effect this, to add dignity and distinction to it." An admirable definition of certain kinds of style, no doubt. Dignity and distinction necessarily attend every good style, but to attain these it would seem, to judge by many of the examples which Mr. Arnold cites from Milton and others, as tho he required more recasting, re-reading of expression, than is at all necessary. He dwells so fondly on Milton's most elaborate and artistically condensed lines that one would almost be led to sup-

pose what cannot be, that he denies the highest praise to that most perfect style of all, which bears with it "the charm of an uncommunicable simplicity." I would therefore take leave to extend the meaning of poetic style a little wider, and to say that, whenever a man poetically gifted expresses his best thoughts in his best words, there we have the style which is natural to him, and which, if he be a true poet, is sure to be a good style. It may no doubt be something very different from the styles which have won the world's admiration in Virgil, in Dante, in Milton. Chaucer has none of that "peculiar kneading and recasting of expression" which these poets have. Yet Chaucer has a style of his own in which all acknowledge a peculiar charm. Even a poet who paid so little heed to style and often worked carelessly as Walter Scott did is not without a compensating interest, when he chooses to put forth his full power. In fact, every great poet has his own individual style, which we recognize at once when we meet with it. To attempt to characterize the style that is proper to each of the great masters is not my present purpose. But there is one point of view from which they all appear divided into two great classes as regards style. Some never appear except in their most finished style—they allow nothing to escape them which has not been touched in their best manner, elaborated with their deftest hand. Of this order are Sophocles, Virgil, Horace, Milton, Gray. These are never seen abroad except in court dress, with ruffles and rapier. On the other hand Homer, Shakespeare, Cowper, Wordsworth, above all Scott, are often content to work more slackly, and are not ashamed to appear in public with hobnailed shoes and shooting-coat. Only when their genius is stirred by some great incident, some high thought, some overmastering emotion, do they rise to their full pitch of power and display their hidden energy. Critics are apt to speak as if this latter class, who do not always walk on the highest levels of style, but sometimes descend nearer to prose, were by that very fact proved inferior to the great masters of style and metre, whose bow is always at the full bend. For my own part I take leave to doubt this canon. Rather it would seem to be a sign of more spontaneous genius to be able sometimes to unstring its powers. In a long

poem especially, the intervention of barer ground and more level tracts, far from impairing the total effect, affords relief to the mind, and makes the surrounding heights appear more impressive. Such alternations of style reflect the rising and falling which is incident to the human spirit more truly than the high pressure of uniformly sustained elevation.

There is one malady to which poetic expression is, by its very nature, peculiarly exposed, and that is conventionalism. Even in the commonest prose-writing there are, it is well known, a whole set of stock words and phrases which good taste instinctively avoids. It is not that these were originally bad in themselves, but they have been so used up and tarnished that one never hears them without a sense of commonness and fatigue. A good writer keeps out of such ruts, and finds some simpler and fresher way of expressing what he has to say. But if the danger of being entangled in outworn commonplaces besets the prose-writer, much more does it waylay the poet—and for this reason. High-pitched imagination and vivid emotion tend, just because they are so vivid and so personal, to embody themselves in a language which is peculiar and unique. They shape for themselves a whole economy of diction and rhythm, which, from their very uncommonness, strike the ear and rivet the attention. Such diction and rhythm, admirable in the hands of the original poet who first employed them, have this property, that they very easily lend themselves to imitation. However racy and instinct with meaning a style may have been at first, when once it has become the common stock in trade of future and lesser poets nothing can be more vapid and unreal. It requires some great revolution to come and sweep this conventional diction into the limbo “of weeds and outworn faces,” that the intellectual atmosphere may be left clear for some new and more natural growth of language.

Not once only or twice in the history of literature has this malady of conventionalism smitten it to the core. The great Roman poet, perhaps the greatest artist of language the world has seen, created for himself an elaborate rhythm and a high-wrought language, tessellated with fragments from all former poets, yet worked into an exquisite and harmonious whole which was simply inimitable. But in the hands of

Silvius Italicus, Statius, and others the Virgilian hexameter gives one the sense of a faded imitation from which the life is gone. Milton, perhaps the next greatest artist of language, molded for himself a "grand style" of his own, with a similar result. When his blank verse, with its involved and inverted structure, became the heirloom of English poets, it spoiled all our blank verse for nearly two centuries. No meaner hand than that of the great master himself could wield his gigantic instrument. When its tones were recalled in the cumbrous descriptions of Thomson, and in the sonorous platitudes of Young, the result was weariness. Another tyrant who for several generations dominated English verse was Pope. What Milton did for blank verse, Pope did for the heroic couplet—left it as a tradition from which no poet of last century could entirely escape. Goldsmith indeed in his "Deserted Village," and Gray in his "Elegy," returned somewhat nearer to the language of natural feeling. But it was not till Burns and Cowper appeared that poetry was able to throw off the fetters of diction in which Milton and Pope had bound it. Burns and Cowper were the precursors of a revolt against the tyrant tradition, rather than the leaders of it. The return they began towards a freer, more natural diction, came from an unconscious instinct for nature, rather than from any formal theory or any announced principles on which they composed. In Burns it may almost be said to have been by a happy accident. He had been reared where literary fashions were unknown. His strong intellect naturally loved plain reality, and his whole life was a rebellion against conventions and proprieties, good and bad alike. When his inspiration came, the language he found ready to his hand was not the worn-out diction of Pope or Shenstone, but the racy vernacular of his native country. It was well that he knew so little of literary modes when he began his poetry. For late in life he confessed that had he known more of the English poets of his time, he would not have ventured to use the homely Westlan' jingle which he has made classical. When he did attempt to write pure English verse, the result was third-rate conventional stuff. As for Cowper, it was only after a time, and then but in part, that he emancipated himself from

the old trammels. In his first volume, published in 1782, containing "Table Talk," "Progress of Error," and other pieces, we see his fine wit and delicate feeling laboring to express themselves through the forced antithesis and monotonous rhythm of Pope. The blank verse of "The Task" is freer, more unembarrassed, and yet it contains a strange intermingling of several distinct manners. Almost in the same page you find the stately Miltonic style, with its tortuous involutions employed for the homeliest, even trivial matters, and within a few lines such passages of playful humor or sweet pensiveness as his address to his "pet hare," or his allusion to his own spiritual history in the pathetic lines beginning

"I was a stricken deer that left the herd
Long since. . . ."

It is in such passages as these last that Cowper has rendered his best service to English poetry, by showing with what felicitous grace the blank verse lends itself to far other styles than the stately Miltonic movement. And yet towards the end of his life, in his translation of Homer, he returned to the Miltonic manner, and by doing so spoiled his work.

Burns and Cowper then were, as I have said, the forerunners of the revolt against stereotyped poetic diction, not the conscious leaders of it. The end of the old poetic régime came with the great outburst of new and original poetry which marked the last decade of the former century and the first two decades of the present. It required some great catastrophe to remove the accumulations of used-up verbiage which had so long choked the sources of inspiration, and to cut for the fresh springs of poetic feeling new and appropriate channels of language. It was as tho some great frozen lake, which had already been traversed here and there with strange rents, as in Burns' and Cowper's efforts, were suddenly in one night's thaw broken up, and the old ice of style which had so long fettered men's minds had been swept away forever. In the great outburst of song with which England ushered in this century, individuality had full swing. The exuberance, not to say the extravagance, of young genius was unchecked. His own impulse was to each poet his law. Each uttered himself in his

own way, in a style of his own, or without style, as native passion prompted. In their work there was much that was irregular, much that was imperfect, but it was young imagination revelling in new-found strength and freedom. Criticism that had insight, that could be helpful, there was none extant. For Jeffrey with his *Edinburgh Review* did his little best to extinguish each rising genius as it appeared. Among the host of British poets then born into the world six at least may be named of first-rate power. Each of these shaped for himself a style which was his own, individual, manly, and, with whatever faults, effective. These six were Wordsworth, Coleridge, Scott, Byron, Shelley, Keats. Each of these had a style of his own, and we know it. None of them, it is true, always maintained their own highest level of form, rhythm, and diction, as Milton did, as Gray may be said to have done. They were all of them at times hasty and even slovenly in style; but each of them, when he was at his best, when he was grasping with his greatest strength, had substance, had something of his own to say, which he did say in his own manner. Of these six poets only two have left criticism as well as poetry. In two of them, Scott, I mean, and Byron, the absence of criticism is conspicuous. For tho Byron did maintain some critical controversy in favor of Pope, yet it is a crude sort of criticism, the offspring rather of prejudice and dislike to some contemporary poets than of matured judgment. The two younger poets, Keats and Shelley, tho they both studied diligently the old poets, never announced their principles of criticism. Of all the poets of his time, Scott was the one who set least store by style. He worked always rapidly, often carelessly, writing whole pages, I might almost say cantos, which do not rise above ballad ding-dong. And yet when he put forth his full strength on a subject which really kindled him, he could rise to a dignity and elevation truly impressive. Tho the facility of the octosyllabic couplet often betrayed him into carelessness, yet there are many passages in which he has made it the best vehicle we possess for rapid and effective narrative—perhaps also for natural description.

The early stanzas of "The Lay," the opening lines of "Marmion," the description of Flodden battle—the most perfect

battle-piece which English poetry contains,—these are samples of Scott's style at its best—a style which he has made entirely his own, and in which he has had no equal. Again in "Rosabelle," in "The Lay," and of "The Eve of St. John," and in some others of his ballads, he has lifted, as no other poet has done, the old ballad form to a higher power. In all the forms of the ballad, and in romantic narrative, if in no other poetic style, Scott was a master.

Of the six poets above named two only, I said, were critics, Wordsworth and Coleridge. These both announced the principles by which they estimated poetry, and—what is noteworthy—their criticism, far from marring the originality of the poetry they composed, only enhanced its excellence. In his own practice Wordsworth not only rejected the whole of the poetic diction that had been in vogue since the days of Dryden, not only fashioned for himself a style of his own, and forms of expression which his contemporaries derided, but which he maintained to be the natural and genuine language of true thought and feeling—he not only did this, but gave to the world his reasons for doing so. The two prefaces appended to the "Lyrical Ballads," in which he attacked the fashionable poetic diction and defended the principles on which he himself composed, are so well known that one needs only to allude to them now. The main positions which he maintained were, first, that poetry should leave the stereotyped phraseology of books and revert to the language which common men, even peasants, use when their conversation is animated and touched by more than ordinary emotion; secondly, that the language of good poetry in no way differs from that of good prose. Even if Wordsworth in some points pressed his theory too far, yet no one who cares for such matters can read the reasoning of these prefaces without instruction.

The two positions which Wordsworth maintained were examined by his friend Coleridge in some chapters of his "Biographia Literaria," which, as they are not perhaps so well known as they deserve to be, I shall here attempt to summarize.

While upholding most powerfully the genius of Wordsworth as a poet, Coleridge could not accept all the principles which his friend had, as a critic, laid down. He agreed with

Wordsworth in condemning "the gaudy affectation of style which had long passed current for poetic diction," and asserted that with some few illustrious exceptions the poetic language in use "from Pope's translation of Homer to Darwin's 'Temple of Nature' may claim to be poetic for no better reason than that it would be intolerable in conversation or in prose." He showed, moreover, that the faults which disgusted Wordsworth were as much violations of common-sense and logic as of poetic excellence. Yet while agreeing with Wordsworth in the object of his attack, he did not approve all the arguments with which Wordsworth had assailed it, or assent to all the articles of the poetic creed which he promulgated.

In opposition to Wordsworth, Coleridge maintained that the peasantry do not, as Wordsworth held, speak a language better adapted to poetic purposes than that which educated men speak, and that in the former the primary feelings and affections are not simpler, truer, deeper than in other men. If Wordsworth had found it so among the Cumberland dalesmen, this arose from exceptional circumstances—circumstances which have now almost disappeared. The peasantry of the midland or southern counties are in no way purer or nobler than their superiors in station. Coleridge further protests against Wordsworth's advice to adopt into poetry the language of rustics, only purifying it from provincialisms, and he maintains that the language of the most educated writers, Hooker, Bacon, Burke, is as real as that of any peasant, while it covers a far wider range of ideas, feelings, and experiences. The language of these writers differs far less from the usage of cultivated society than the language of Wordsworth's homeliest poems differs from the talk of bullock-drivers.

Again, Coleridge will not hear of the doctrine that between the language of prose and that of metrical composition there is no essential difference. For, since poetry implies more passion and greater excitement of all the faculties than prose, this excitement must make itself felt in the language that expresses it. Of this excited feeling metre is the natural vehicle—metre, which has its origin in emotion tempered and mastered by will; or, as Coleridge expresses it, metre, which is the result of the balance which the mind strikes by its voluntary effort.

to check the working of passion. Hence, as there ought to be present in all metrical language a union of spontaneous impulse and voluntary purpose, both of these elements ought to reflect themselves in the language employed. And the presence of these two elements, both at a high pitch, must color the language of the poet, and separate it from that of the prose-writer, which expresses rather the calmer workings of the pure understanding. While thus dissenting from Wordsworth's positions in the unqualified extent to which he carried them, Coleridge showed that what Wordsworth really meant to enforce was his preference for the language of nature and good sense before all forms of affected ornamentation—for a style the most remote possible from the false and gaudy splendor that had so long usurped the name of poetry. The thing Wordsworth really desired to see was a neutral style, common to prose and poetry alike, in which everything should be expressed in as direct a way as one would wish to talk, yet in which everything should be dignified and attractive. Such a neutral style Coleridge showed that English poetry already possessed, and he cited examples of it from Chaucer, Spenser, and other poets. This, he believes, is what Wordsworth in his theory was aiming at. But is it not, exclaims Coleridge, surprising that such a theory should have come from—that the establishment of a neutral style should have been advocated by—a poet whose diction, next to that of Shakespeare and of Milton, was the most individualized and characteristic of all our poets? For in all Wordsworth's most elevated poems, whether in rhyme or in blank verse, "he rises," says Coleridge, "into a diction peculiarly his own—a style which every one at once recognizes as Wordsworth's." These words of Coleridge are to be remembered when we come to Mr. Arnold's saying that Wordsworth has no style. The chapters of the "Biographia Literaria" in which Coleridge questions Wordsworth's canons of criticism, and goes on to vindicate the excellence of his poetry, are well worthy of careful study by all who care for such matters. Taken along with many fragments scattered throughout the same author's "Literary Remains," they form perhaps the finest criticism which our language contains. It would seem to prove that criticism does not necessarily suppress imagination, when we turn to the

poetry of these two poet-critics and find how high is the imaginative quality that inheres in both. No one whose judgment is worthy of regard has ever questioned Wordsworth's power of imagination, or denied that the substance of his poetry is pre-eminently imaginative. But the gift of style has been denied him, and that by no less an authority than Mr. Arnold. In the fine and suggestive preface with which Mr. Arnold has introduced his recent admirable "Selections from Wordsworth," he has said Wordsworth has no style; he has fine Miltonic lines, but he has no assured poetic style of his own, like Milton. When he seeks to have a style of his own he falls into ponderosity and pomposity. Probably Mr. Arnold here uses the word "style" in some restricted sense, meaning by it such artistic form as those writers only display who have fashioned their English on the model of ancient classic poets. It is true that in this sense Wordsworth has "no study of poetic style," but no more had Shakespeare. It may be true that "when he seeks to have a style" he falls into pomposity. This is just what one would expect—that when a poet seeks to have a style, he should cease to be himself and should fall into some absurdity. But it is exactly because Wordsworth so seldom sought to have a style, because, when he is most sincere, most fully inspired, he never thought of style, but only of the object before him, because he was so entirely absorbed in it, and sought only how most directly he might express it—it is because of this sincerity and wholeness of inspiration that he attained to express his thoughts with the most perfect purity, the most transparent clearness, the most simple and single-minded strength of which the English language is capable. If by poetic style we mean the expression of the best thoughts in the best and most beautiful words, and with the most appropriate melody of rhythm—in this sense Wordsworth, when at his best, has a style of his own, which is perfect after its kind. When at his best, I say, for I have no wish to deny that, in the large amount of poetry which he has left, there is a good deal which is below his highest level.

But take his lyrical pieces, those which are the product of his best decade between 1798 and 1808. They are so well known I need hardly allude to them. But the lines on "The Cuckoo,"

“O blithe newcomer!” “She was a phantom of delight,” “I heard a thousand blended notes,” the poems about “Lucy,” “The two April mornings,” “The Fountain,” “The Solitary Reaper,” “The Poet’s Epitaph,”—if these are not poems with a style at once unique and perfect, our language has no other poems which can be so called. Or turn to the sonnets. Among so large a number of these as Wordsworth composed there is, of course, great variety of excellence. But it is hardly possible to conceive more lucid, nervous, or dignified language than that in which the best of his sonnets are expressed. Take, for instance, the morning sonnet on Westminster Bridge, and the evening one beginning

“It is a beauteous evening, calm and free.”

Can language render sentiment more perfectly than these do? In these and a few others Wordsworth triumphs over the last difficulty which, from its very structure, besets the sonnet. He rises above all sense of effort—the thought runs off pure and free. The series of “Ecclesiastical Sonnets” are far from his best. They were made to order rather than by spontaneous impulse. Yet even these contain lines so dignified and distinguished in style that, when once heard, they stamp themselves on the memory forever. It is in these we hear of the shattered tower, which

“Could not even sustain
Some casual shout that broke the silent air,
Or the unimaginable touch of time.”

In these, that regretful sigh over

“Old abbeys,
Once ye were holy, ye are holy still;
Your spirit freely let me drink, and live.”

In these, too, that fine ejaculation inside of King’s College chapel, Cambridge:

“They dreamt not of a perishable home
Who thus could build.”

Again, spirited narrative was not much in Wordsworth’s way, but description was. In “The White Doe of Rylston” the incidents are of little account, the sentiment is deep as the

work. The first 170 lines of that poem, for mellowed diction, for rhythm and melody appropriate to the meditative and pensive theme, are a study in themselves. The octosyllabic metre has nowhere, that I know, lent itself to more finely modulated music, as soothing as the murmur of Wharfe River, which it describes.

Of Wordsworth's blank verse there is much, no doubt, which may freely be made over to the scourge of the critic. It is often cumbrous, prolix, altogether prosy. The last Book of "The Excursion," for instance, which tells how the Wanderer and his friends

"Seated in a ring partook
The beverage drawn from China's fragrant herb,"

and discussed matters social and educational, would better have been written as a pamphlet than as a poem. Whole pages, too, of the Prelude there are which are little better than wordy prose cut into ten-syllable lines. Yet let me whisper to the docile reader, if not to the self-complacent critic, that even in the least effective of Wordsworth's blank verse he will find in every page some line or phrase or thought weighty with individual genius. Even admitting that Wordsworth does, like Homer, sometimes nap, and oftener in blank verse than elsewhere, yet when he is really possessed by his subject and kindles with it, he has even in his blank verse, where it is least Miltonic, attained a majesty and a power which make it more rememberable than any blank verse since Milton's. Of this kind is the blank verse of "Michael," "The Lines on Tintern Abbey," many a passage in the Prelude, such as the description of a pass in the high Alps; of this kind, too, are some of the narrative parts of "The Excursion"—The Story of Margaret in the First Book, The Story of Ellen, the village maiden, betrayed and repentant, in the Seventh Book:

"Meek saint ! by suffering glorified on earth !
In whom, as by her lonely hearth she sat,
The ghastly face of cold decay put on
A sun-like beauty, and appeared divine !"

It would be easy to go on quoting passages or poems without number which bear out the assertion that Wordsworth fashioned for himself a style as unlike as possible to the vapid

poetic diction which he denounced, yet akin to whatever is manliest, noblest, and best in the English poetry of all ages. Many causes were doubtless at work to put out that outworn poetic language. But no one agency did so much to discredit it as the protest which Wordsworth made against it in his prefaces, and still more by the example of his poems. These have set a standard of what a pure and sincere diction in poetry should be, just as the sermons and other writings of Dr. Newman have done in prose. Both have alike evoked new power from the English language, and shown what capabilities it possesses of fitting in closely to the deepest and most recondite thought, as well as to the tenderest sentiment, by which any spirit of man is visited.

Coleridge we have seen as a critic. One word about his poetry; for he is perhaps the finest instance we have in England of the critical and poetical power combined. The editions of his poems usually published contain much that is casual and second rate, especially among his early poems and his "Religious Musings." They contain also something which no other poet but he could have given. Of his best pieces I may say in the words of a living poet and critic with whom, in this instance, I am glad to agree, "The world has nothing like them, nor can have; they are of the highest kind, and of their own." These best pieces are "Christabel," "The Ancient Mariner," and "Kubla Khan." Over this last fragment Mr. Swinburne, who when he does admire knows no bounds in his admiration, goes into raptures, and exhausts even his eulogistic vocabulary. "The most wonderful of all poems," he calls it. "In reading it," he says, "we are rapt into that paradise where 'music and color and perfume are one'; where you hear the hues and see the harmonies of heaven. For absolute melody and splendor it were hardly rash to call it the first poem of the language." Especially he dotes over these lines in it:

" Five miles meandering with a mazy motion
Through wood and dale the sacred river ran,
Then reached the caverns measureless to man,
And sank in tumult to a lifeless ocean ;
And mid this tumult Kubla heard from far
Ancestral voices prophesying, war."

It is not wonderful that a poet who himself revels to excess in melodious words should go into ecstasies over a poem in which his own favorite devices of alliteration and assonance and rhythm have done their best to make a miracle of music. For my part, I cannot compare "Kubla Khan" with "Christabel." The magical beauty of the latter has been so long canonized in the world's estimate, that to praise it now would be unseemly. It brought into English poetry an atmosphere of wonder and mystery, of beauty and pity combined, which was quite new at the time it appeared, and has never since been approached. The movement of its subtle cadences has a union of grace with power which only the finest lines of Shakespeare can parallel. As we read "Christabel" and a few other of Coleridge's pieces, we recall his own words:

"In a half-sleep we dream,
And dreaming hear thee still, O singing lark!
That singest like an angel in the clouds."

Or to leave those few poems in which Coleridge has touched the supernatural world with so matchless skill, and to come nearer earth, take as a fine specimen of his style in human things the opening and closing stanzas of his "Ode on France." What "a musical sweep" there is in these long-sustained paragraphs! Coleridge, from his temperament, was not often at the full pitch of his powers; but when he was, he possessed a style which, for inner delicacy and grace combined with inspired strength and free-sweeping movement, made him one of the few masters of poetic diction, one who, we may be quite sure, will in our language remain unsurpassed. Too early he forsook the Muse, or the Muse forsook him; and the most subtle imagination of his time was plunged in the Sterbonian bog of German metaphysics. Yet in his old age the Muse for brief moments revisited him, and he threw off a few short jets of epigrammatic song, or such lines as those entitled "Youth and Age," in which the old witchery once more was his.

Wordsworth and Coleridge were critics and poets at once, and it is because they were so that, in speaking of style, I have dwelt at length on their critical principles and their poetic per-

formance. Byron, on the other hand, was exclusively a poet, and no critic. Of him Mr. Swinburne has truly said that "his critical faculty was zero, or even a frightful minus quantity." He had never even attempted to master his art, or to take the measure of himself and to know the nature of the materials he had to work with. In all that he did he trusted only to the fiery force that stirred him, and took counsel only with his own fierce Titanic spirit. It is by the vast strength and volume of his powers, rather than by any one perfect work, that he is to be estimated. He does not seem to have had much ear for the music of metre, or to have studied its intricacies and refinements. But when the impulse was on him he poured forth what was in him with wonderful rapidity, home-thrusting directness, and burning eloquence—eloquence that carries you over much that is faulty in structure and imperfect or monotonous in metre. He himself did not stay to consider the way he said things, so intent was he on the things he had to say. Neither any more does the reader. His cadences were few, but they were strong and impressive, and carried with them for the time every soul that heard them. If we look for what is best in Byron's poetry, it is not to his romantic narratives that we turn—to his "Giaours" and his "Laras." Neither is it to "Childe Harold," much as it contains of interest, for in the Spenserian stanza Byron never was quite at ease. It was only after attempting many styles, with more or less success, that at last he hit upon a style entirely his own—entirely fitted to express all the various and discordant tones of his wayward spirit. The note which he first struck in "Beppo" he carried to its full compass in "Don Juan." In the "ottava rima"—that light, fluent, plastic measure which he made at once and forever his own—he found a fit vehicle for the comic vein that had long slumbered within him and in his earlier poems had given no sign, and for the satire that he commanded, a satire sometimes light and playful, oftener scornful and cynical, yet even in the midst of its wildest license and ribaldry from time to time suspending itself that the poet may flash out into splendid description, or melt into pathetic retrospect or brief but thrilling regret. For good or for evil, it must be said that all the variety of Byron's

nature, as he let it become, and his most characteristic style are embodied in the peculiar texture and original versification of "Don Juan."

Byron, as all know, often affected gloom and played with misanthropy, and his poems reflecting these moods are all more or less in a falsetto tone. The sincerest, as they are the most touching poems, expressive of his personal feelings, are those on "Thyrsa," and sincerity gives to the verses a beauty which, once felt, can never be forgotten. Over blank verse he had no great mastery; and yet there is one poem in this measure in which he reverts to his early love with a simple sincerity and a piercing pathos which have never been surpassed. In the "Dream," it is the very artlessness that makes the charm. The lines thrill with intense and passionate sincerity. On the whole, of Byron's style it may be said that if it has none of the subtle and curious felicities in which some poets delight, it is yet language in its first intention, not reflected over or exquisitely distilled, but, in his strongest moments, coming direct from the heart and going direct to the heart. Placed under the critical microscope, his language, no doubt, shows many flaws and faults, but, far beyond any of his contemporaries, he has the manly force, the directness, the eloquence which passion gives. Passionate eloquence is the chief characteristic of his style. Among the poets who appeared in the first two decades of this century, as among all poets, readers will choose their favorites according to their sympathies. But putting aside personal preferences, every one must allow that none of the poets of that time was more "radiant with genius" and rich in promise than the short-lived Keats. His genius showed itself in a wonderful power of style, which, after striking many notes and reflecting many colors caught from the old poets he loved, was settling down into a noble style of his own, when his brief life closed. His first poem, "Endymion," for all its crudeness and extravagance, undeniably revealed the vitality of young genius, and reclaimed for English poetry the original freedom of the ten-syllable couplet, which had been lost since the days of Chaucer. The influence of Spenser, who was the earliest idol of Keats, is strong in his Tales, "The Eve of St. Agnes" and "Isabella." There is in them, too, some flavor

of the Italian poets, whom he studied much while he was composing his Tales. The "grand style" of Milton has never been so marvellously reproduced as in "Hyperion;" but from this great fragment Keats himself turned with some impatience, pressing on to utter himself in a style more genuinely his own. This he attained in his odes "On a Grecian Urn," "To Autumn," "To a Nightingale," and in a few of his sonnets. In these he was leaving behind him all traces of early mannerism, and attaining to that large utterance, combining simplicity with richness, strength with freedom and grace of movement, which was worthy of himself. The odes especially, so finished, so full of artistic beauty, flow forth into their full sonorous harmonies and leave no sense of effort. In his later poems, from behind the love of sensuous beauty, which was the groundwork of his genius, there was coming out a deeper thoughtfulness and human feeling, which make us more regret his early fate. Perhaps there is no other instance of so instinctive a yearning towards the old Hellenic life as is to be seen in Keats. His thirst for artistic beauty could find no full satisfactions in the productions of the cold north, and turned intuitively to the fair creations of the elder world as to its native element. This is the more remarkable, as we know how slenderly equipped Keats was with what is called scholarship, and that he could reach the Greek poets only through translations. His classical instinct shows itself not only in his love of Greek subjects and Greek mythology, but in his wonderful reproduction of Greek form. As we read such lines as these :

" What little town by river or sea-shore,
Or mountain-built with peaceful citadel,
Is emptied of its folk this pious morn?"

or these on the nightingale's song :

" The same that found a path,
Through the sad heart of Ruth, when, sick for home,
She stood in tears amid the alien corn"—

we ask, What finished Greek scholar has ever so vividly recalled the manner of the Greeks?

To speak of the style of Shelley there is no space here, and

as comments on his poetry have of late so much abounded there is the less need. Suffice it to say that unbiassed criticism generally admits that his exuberant power of language often overmastered him, and his delight in melodious words tempted him at times to sacrifice sense to sound. Condensation and self-repression would have improved much which he wrote. On the other hand, it must be owned that by his subtle witchery he caught many evanescent hues of earth and sky which no poet before him had noticed, and expressed many tones of longing and regret which no language but his has ever hinted.

Fifty years and more have passed since the voices of all the great poets I have named became mute, but in the interval between then and now England has had no lack of poetry. Whether any of it has reached as high a level as the best works of the masters of the former generation may be doubted. The world is not likely soon again to see another flood of inspiration so deep as that which burst on England with the opening of this century. In the poetry of the last fifty years many notes have been struck, so many and so different that it would not be easy to characterize them all. On the whole, it may perhaps be said that two main branches of poetic tendency are discernible —one which carries on the style and impulse derived from Keats and Shelley, one which more or less is representative of Wordsworth's influence. Of these two tones the former would seem most to have won the world's ear, and its chief voice is that of the Poet Laureate. Mr. Tennyson is, as all know, before all things an artist; and as such he has formed for himself a composite and richly wrought style into the elaborate texture of which many elements, fetched from many lands and from many times, have entered. His selective mind has taken now something from Milton, now something from Shakespeare, besides pathetic cadences from the old ballads, stately wisdom from Greek tragedians, epic tones from Homer. And not only from the remote past, but from the present, the latest science and philosophy are both reflected in his thought and add metaphor and variety to his language. It is this elaboration of style, this "subtle trail of association, this play of shooting colors," pervading the texture of his poetry, which has made him be called the English Virgil. But if it were asked which of his immediate

predecessors had most influenced his nascent powers, it would seem that while his early lyrics recall the delicate grace of Coleridge, and some of his idyls the plainness of Wordsworth, while the subtle music of Shelley has fascinated his ear, yet, more than any other poet, Keats, with his rich sensuous coloring, is the master whose style he has caught and prolonged. In part from Shelley, and still more from Keats, has proceeded that rich-melodied and highly colored style which has been regnant in English poetry for the last half-century. Tennyson has been the chief artist in it, but it has been carried on by a whole host of lesser workmen.

Alongside of this, the dominant style, there has lived another, more direct, more plain, more severe, which, without in any way imitating, has represented the influence of Wordsworth. However differing in other respects, Keble, Sir Henry Taylor, Archbishop Trench, and Arthur Clough, each in his own way, represents this second tendency, which I may call the plain-speaking, unornamented, and natural style. There is a passage in Mr. Arnold's preface to his selections from Wordsworth, which all who have read must remember, in which he speaks of Wordsworth's nobly plain manner, "when Nature herself seems to take the pen out of his hand, and to write for him with her own bare, sheer penetrating power." But this characteristic, which Mr. Arnold has noted as occasional, occurring in a few poems, such as "The Leech-gatherer" and "Michael," may be extended to all of the best that Wordsworth has done. It marked the broad and radical distinction, enforced by the late Mr. Bagehot, between pure art and ornate art.

The pure style is that which, whether it describes a scene, a character, or a sentiment, lays hold of its inner meaning, not its surface, the type which the thing embodies, not the accidents, the core or heart of it, not the accessories. As Mr. Bagehot expressed it, the perfection of pure art is "to embody typical conceptions in the choicest, the fewest accidents, to embody them so that each of these accidents may produce its full effect, and so to embody them without effort." Descriptions of this kind, while they convey typical conceptions, yet retain perfect individuality. They are done by a few strokes, in the fewest possible words; but each stroke tells, each word goes home.

Of this kind is the poetry of the Psalms and of the Hebrew prophets. It is seen in the brief, impressive way in which Dante presents the heroes or heroines of his nether world, as compared with Virgil's more elaborate pictures. In all of Wordsworth that has really impressed the world, this will be found to be the chief characteristic. It is seen especially in his finest lyrics and his most impressive sonnets. Take only three poems that stand together in his works, "Glen Almain," "Stepping Westward," "The Solitary Reaper." In each you have a scene and its sentiment brought home with the minimum of words, the maximum of power. It is distinctive of the pure style that it relies not on side effects, but on the total impression—that it produces a unity in which all the parts are subordinated to one paramount aim. The imagery is appropriate, never excessive. You are not distracted by glaring single lines or too splendid images. There is one tone, and that all-pervading—reducing all the materials, however diverse, into harmony with the one total result designed. This style in its perfection is not to be attained by any rules of art. The secret of it lies farther in than rules of art can reach, even in this: that the writer sees his object, and this only; feels the sentiment of it, and this only; is so absorbed in it, lost in it, that he altogether forgets himself and his style, and cares only in fewest, most vital words to convey to others the vision his own soul sees. This power of intense sincerity, of total absorption in an object which is not self, is not given to many men, not even to men otherwise highly gifted. But without this, the pure style in full perfection is not possible. It comes to this: that in order to attain the truest and best style, a man must, for the time at least, forget style and think only of things. One instance more of that great law of ethics whereby the abandonment of some lower end, in obedience to a higher aim, is made the very condition of securing the lower one. To employ the pure style in its full power requires the presence of a seer, a prophet-soul; and prophet-souls are few even among poets.

The ornate style in poetry is altogether different from this. When a scene, a sentiment, a character, has to be described, it does not penetrate at once, as the pure style penetrates, to the idea which informs the scene, the sentiment, the character, and

leave it before you, impressed by a few words on the mind forever. But it gathers round the scene or character which it seeks to convey many of the most striking accessories and associations which it suggests, and so sets it before you clad in the richest and most splendid drapery it will bear. It sees the informing idea, and expresses it, but by its adjuncts rather than by its bare essence. The vision of the inner essence is not intense enough to make it impatient of accessories and ornamentation. It so delights in imagery, distant allusion, classical retrospect, that the attention is apt to be led off by these, and to neglect the central subject. This ornate style, redundant with splendid imagery, loaded with cloying music, is much in vogue with our modern poets. Mr. Tennyson, who has employed various styles, and sometimes the pure and severe style, has done more of his work in the ornate. As one instance, take his poem on "Love and Duty." It is intense with passion, the thought is noble and nobly rendered. But after the agony of parting, it occurs to the lover that perhaps the thought of him might still come back, and the poem closes thus:

" If unforgotten ! should it cross thy dreams,
So might it come, like one that looks content,
With quiet eyes, unfaithful to the truth,
Or point thee forward to a distant light,
Or seem to lift a burden from thy heart,
And leave thee freer, till thou wake refreshed,
Then when the first low matin-chirp hath grown
Full quire, and morning driven her flow of pearl
Far-furrowing into light the mounded rack,
Between the fair green field and eastern sea."

This description of mourning is no doubt very pretty, but I have always felt that it might well have been spared us, after the passionate parting scene immediately before it.

"A dressy literature, an exaggerated literature, seem to be fated to us. These are our curses, as other times had theirs." With these words Mr. Bagehot closes his essay to which I have alluded. No doubt the multitude of uneducated and half-educated readers, which every day increases, loves a highly ornamented, not to say a meretricious, style both in literature and in the arts; and if these demand it, writers and artists will

be found to furnish it. There remains, therefore, to the most educated the task of counterworking this evil. With them it lies to elevate the thought and to purify the taste of less cultivated readers, and so to remedy one of the evils incident to democracy. To high thinking and noble living the pure style is natural. But these things are severe, require moral bracing, minds not luxurious but which can endure hardness. Softness, self-pleasing, and moral limpness find their congenial element in excess of highly colored ornamentation. On the whole, when once a man is master of himself and of his materials, the best rule that can be given him is to forget style altogether, and to think only of the reality to be expressed. The more the mind is intent on the reality, the simpler, truer, more telling the style will be. The advice which the great preacher gives for conduct holds not less for all kinds of writing: "Aim at things, and your words will be right without aiming. Guard against love of display, love of singularity, love of seeming original. Aim at meaning what you say, and saying what you mean." When a man who is full of his subject and has matured his powers of expression sets himself to speak thus simply and sincerely, whatever there is in him of strength or sweetness, of dignity or grace, of humor or pathos, will find its way out naturally into his language. That language will be true to his thought, true to the man himself. Free from self-consciousness, free from mannerism, it will bear the impress of whatever is best in his individuality.

And yet there is something better even than the best individuality—a region of selfless humanity, of pure, transparent ether, into which the best spirits sometimes ascend. In that region there is no trace, no color of any individuality. The greatest poets, uttering their highest inspirations, attain there a style which is colorless, and speak a common language. It is but in rare moments that the highest attain these heights, but sometimes they do attain them.

Πόλλαι μὲν θνῆτοις γλῶσσαι μία δ ἀθανάτοισι.

("Mortals speak many tongues, the immortals one.")

J. C. SHAIRP.

THE ORGANIZATION OF LABOR.

II. THE INTEREST OF THE LABORER IN PRODUCTION.

IN a former article attention was called to the important part played by executive ability and organizing power in the production of wealth, and to the comparatively small number of the men through whose powers this increase was brought about. To whomsoever the credit may be given, the effect is indisputable that the production of the articles designed to supply nearly every human want has, during the past century, increased many-fold. It would therefore be naturally supposed that the average comfort of the masses has also increased to a great extent, if not in proportion to the increase of wealth. But the opinion is widely prevalent that this conclusion is falsified by the fact, and that the increase of wealth has really been productive of no benefit to the wages class, whose condition, it is asserted, has remained stationary, or even grown worse. Those who adopt this view probably form a small minority of the thinking public; yet their voice is loudly heard in the land. A rather large party adopting the conclusion that the laborer is in some way deprived of his rightful share of the common product, encourage him in attempts to better his condition through legislation and organization. Two classes of questions thus present themselves, the one referring to the actual condition of the laboring classes as affected by the increase of wealth, the other to the bettering of this condition through legislation and organized effort.

The influence of increasing wealth upon the interests of various classes may be studied in two ways; the one deductive, the other inductive. Adopting the first method, we analyze the causes which affect the well-being of the masses and show their mode of operation. In using the second method, we should

compare the condition of the laborer as shown in history with his actual condition among us. Our first subject will therefore be the economic effects of cheapened production, especially its effect upon the wages class.

At the outset we call to mind a principle already laid down; or, that the general economic effect of cheapened production upon society is the same in whatever way the cheapening is brought about, whether by labor-saving machines, cheap foreign labor, the organization of industry, or improved methods of production. The effect of all cheapening processes can therefore be studied as a single subject, and will be the first subject of consideration.

Whenever a given commodity is produced at a cheaper rate a certain amount of money is saved to the community. The money thus saved measures what, for the time being, appears to be lost to the laborer. If one hundred shoemakers supply the whole community with boots when two hundred were before required, then the wages of the one hundred shoemakers now left without employment stay in the pockets of the community who formerly purchased their boots. At first sight, therefore, the effect seems to be to the disadvantage of the laborer, and the ordinary vision goes no farther.

But the community must dispose of the money thus saved in some way, and can only do so by purchasing labor or its products. If the total amount thus kept back is \$200, then that sum will remain to be spent in some other product than boots. Thus will arise a demand for \$200 worth of labor which would not have existed but for the improvement in shoemaking. What the shoemaker has lost must be spent in purchasing some other product than shoes. If the one hundred idle shoemakers could produce the articles which their customers wanted in place of the shoes, they might go to the men who had their wages in their pockets and offer to do something for them with the certainty of being employed at their former compensation. But the chances are that the community which has saved the money will spend it in something else than shoes, and thus for the time being the shoemakers are losers and other producers are gainers.

Since the total demand for labor and its products is the same as before, the diminished demand for shoes being compensated

by the increased demand for other products, a compensation is sure to occur. People must stop learning to make shoes, and the shoemakers must bring up their children to make articles on which people spend what they have saved in shoes. As soon as employments can thus be changed, the wages equilibrium is restored and every one is once more employed. What it is with shoes it is with every other department of industry. There is no such thing as a general falling off in the demand for industry in consequence of the introduction of labor-saving machines. Every dollar immediately lost by the laborer remains in the pockets of the community to be expended by employing labor in some other form.

But as just intimated, the new demand may be for something which the old laborers cannot furnish. The theory of a complete compensation assumes that a certain number of them can change their employments and enter new ones without being at a great disadvantage. If they as individuals cannot do this, it is assumed that their children can. This assumption is quite true if the new demand is for products or services requiring only the same order of skill which was required for the old demand, now cut off. As society is constituted such will not be the case. The more delicate the processes of industry, the more expensive the machinery, the more minute the co-operation, the more fastidious the consumer of the product, the greater the demand for a high order of skill in every department of industry, and for that nameless combination of qualities which enables a man to succeed in life, and the less the demand for assistance which is not thoroughly adapted to the task required. Thus the mere casual laborer is at a relative disadvantage as production is improved.

It is, however, in the status of the independent producer that the greatest change takes place. When the artisan who has worked contentedly at his trade for half a lifetime finds himself in competition with a machine or factory turning out his product at one half the price which he has been receiving, it is impossible for him any longer to retain his independent position. Even if he can change to some other pursuit, he finds it overstocked with producers in the same predicament as himself. If we assume the leading feature of the agency which has cheapened the product to be the co-operation of many individuals under one head,

then this co-operation, instead of increasing the demand for the independent laborer, really diminishes it and increases the necessity of his seeking co-operation as a mere matter of self-defence. He is therefore more and more under the necessity of giving up his individuality and becoming a part of an organism.

It cannot therefore be denied that every considerable improvement in production tends to the temporary disadvantage of such producers as cannot readily or advantageously change their employment. So far as the immediate effect is concerned, the opposition of laborers and artisans to cheap labor and improved machinery is not quite so inane as economists are in the habit of setting forth, if their interests are alone consulted. The improved machinery tends to their disadvantage, but what they do not see is that it tends to the advantage of all other laborers and artisans except themselves. This leads us to the consideration of another economical effect which is advantageous to every one.

The real prosperity of the individual depends on two great factors, the money income which he can command for his services and the money price at which he can procure what he needs for consumption. So long as the ratio of these two remains constant his prosperity is unaffected. Now it is a curious psychological phenomenon, familiar to all who study the tendencies of current thought, that men are prone to take an entirely different view of these two elements. Altho each individual, in seeking to purchase his week's supply of groceries or his winter suit of clothes, never shows any lack of zeal in supplying his individual wants at the lowest attainable price, yet the general disposition of organized bodies having public objects in view is to look upon every cheapening process as a great evil; especially if the cheapening occurs through the introduction of cheap forms of labor. Countless organizations spring up having for their motto, "A fair day's wages for a fair day's labor," which means simply the highest wages it is possible to command from employers. We find few such organizations having for their object to gain food and clothing at the lowest possible price. The theory of a protective tariff is founded principally on the supposed evil of cheapness.

Considering simply the object of all efforts of this sort, it is

not unreasonable, being simply to keep wages up to the highest possible point; but by overlooking the true relation of things, the actual result is in the highest degree detrimental. The fact that when wages and prices are increased in the same degree laborers are not benefited is overlooked. But this is not all. If it were equally practicable to raise wages or to cheapen commodities, we might be indifferent which object a movement had in view. In fact, however, the improvement in the condition of the laborer is to be gained only by cheapening commodities without seeking to effect the rate of wages. A general rise in wages is impossible except by an inflation of the currency, which all experience shows inflates prices in a yet greater degree. The real benefit which the laborer gains from the improved organizations of the present time is the cheapening of his means of subsistence, but this is the very effect which is vigorously resisted by those men and unions professing to have the good of the laborer at heart.

The effects of cheapened production of every kind are therefore three-fold, namely:

- A. Damage to all whose products are cheapened by the diminished demand or lower price.
- B. Benefit to all other producers by the greater demand through the money saved by the cheapening.
- C. Benefit to the entire community by being able to purchase at a cheaper rate.

Effects A and B exactly compensate each other as soon as the equilibrium is restored, leaving the result of effect C as a clear benefit to the community. The only difficulty is that to insure the compensation, individually as well as collectively, laborers affected by effect A must change their employment, which may involve not merely a change of pursuit but the surrender of a certain amount of personal independence. But, for the most part, this difficulty is only temporary, while the benefit C is a permanent one enjoyed by future generations as well as by ourselves. Hence, altho a certain amount of suffering may be for the time occasioned by cheapened production, it is not to be taken account of alongside the benefits conferred.

An illustration of these principles may be found in the gen-

eral prosperity of the State of California. This State has more than any other in the Union either gained or suffered by an influx of cheap labor of a kind best calculated to drive all American laborers from the market. The organized effort to expel this cheap labor is perhaps stronger than any similar effort made within recent times in any other State. But have American laborers really suffered in California? Are they less prosperous there than in any other section of the Union? Do they submit to greater privations? Is there any other State in the Union where thousands of them can spare so much time to devote to a public question as they do to the status of the Chinese? We conceive that any correct answers to these questions must make it clear that the American laborers in California are really not a whit the worse off for the competition of the Chinese. The foregoing explanation shows why we should naturally expect this result.

This reasoning ought at least to make us suspicious of any theory which asserts that the masses are worse off than before, notwithstanding the increase in production. The assertion that such is the case, is however, so frequently made with entire confidence, and supported by so powerful a party, that a more minute consideration of the question of fact will be profitable. Here there is danger of sweeping assertions respecting whole classes which may be true only within a limited sphere. We must therefore, to attain precision, consider the case of each class separately.

We remark first that paupers and workers for wages are to be considered as two separate classes. It may be admitted, as a matter of fact, that mendicancy and pauperism have increased with the advance of society. But we conceive it a great mistake to attribute this result to cheapened production except in this indirect way: that the more plentiful the necessities of life, the more easy it will be for a pauper or mendicant to live. The demoralization which affects this class is as unavoidable as insanity, idiocy, or any other physical or mental weakness. In a poor and widely scattered community persons thus afflicted have no chance to live away from their own families. It would be suicidal for a tramp to travel all day with the hope of getting a meal from a family which found it very hard work to feed its

own members. Hence in poor communities a pauper class cannot be perpetuated as such. When we find such a class in a wealthy community, it signifies, not that it has been produced by wealth, but that wealth and ill-directed benevolence keep the class alive. Hence cheapened production tends to the increase of pauperism in much the same way that large accumulations of goods tend to breed a race of burglars.

Nearly the same thing is true of that body of shiftless idlers which is to be found in nearly every modern community. That they shall be produced seems to be a consequence of that law of nature which insures variety among individuals of the same race. That they will be cured of their habits and made into industrious laborers by any other force than that of starvation is a notion so contrary to all experience that we need not stop to refute it. The more wealthy the community, the more easy it is for them to avoid starvation. Hence we may expect to find them more numerous as production increases. The thesis that society at large is in any way responsible for them except through its leniency towards them is one which we conceive cannot be sustained on any sound logical grounds.

We must not, however, be understood as claiming that society can do absolutely nothing towards lessening pauperism or general imbecility except by the process of starving out. We may admit that where these classes are found in great numbers something is wrong in the system of public training. But neither the disease nor the cure has anything to do with the labor question, nor is it affected by the advance of wealth and civilization except in the indirect way already pointed out.

The class with which we are really concerned is that of the honest laborer able and willing to earn his own living. Any correct comparison of his condition during former centuries with that of the present time is so far to the advantage of the latter that no argument ought to be necessary to show it. Nevertheless the assertion that the condition of the wages class has grown worse with the progress of wealth is so frequently urged by writers of reputed respectability that a few sentences may be given to the subject. To refute the opinion alluded to it is only necessary to point out well-known facts. Every one who knows anything of the subject is aware that two centuries

ago the daily wages of a laborer were but a few pennies besides his meat and drink, and that his meat and drink were of a kind which the laborer of the present day would hardly touch. His dwelling would be esteemed a hovel, and was in fact occupied by him and his family in common with pigs and fowls. One of their number only required to work ten hours a day would have been a sort of an aristocrat. As soon as a child of either sex was able to assist in labor it had to go and help its parents, and for the rest of its life was worked so constantly that education was impossible. The reader can imagine for himself the feelings with which those in power would have received a proposition to educate a child of the working class. Strikes were out of the question, not merely because of laws against them, but because it would have been starvation to abstain from work for the purpose of prosecuting them. We may therefore regard it as an established fact of observation that the condition of the honest laborer has greatly improved with the increased production of wealth.

The really intelligent advocates of the labor party take entirely different ground from that which we have just been opposing, admitting the great improvement in the intellectual standard and physical condition of the laborer, but claiming that this improvement has gone just far enough to enable him to appreciate his rights as an equal member of society and to resolve to enforce them. The lesson they draw from the discontent of the wages class is that society is now in a transition state between that in which the laborer is a lower order of being, and that in which his rights are all fully recognized by society. The latter being the state toward which they progress, they will do all in their power to attain it. Unfortunately the suggestions of this school are so vague that they hardly admit of intelligent criticism; in fact, their whole platform is a sentimental rather than a political one. Granting their premises, it may be asked whether the logical conclusion is not that society has made a great mistake in aiming at the elevation of its lower strata.

We shall make but one suggestion on the ethical aspect of the question. All that distinguishes our modern society from that of past and darker ages is the work of a very small fraction of the race. Strike out from our history a few philosophers who

have investigated nature and shown other men how to avail themselves of her powers, a few inventors who have shown how these powers could be applied to practical uses, and a few organizers who have planned our method of combining the labor of many in the best manner, and our society would still be what it was three centuries ago. Considering only the present, the effectiveness of the whole labor of our nation would be greatly diminished should we dispense with a few hundred captains of industry, as was shown in a former article. The masses have therefore no right to complain of the very unequal distribution of the common product, because it is not to the many but to the few that this increase is due. Still no well-meaning person will object to every class putting forth its best efforts to improve its condition in every legitimate and effective way. In fact it may be doubted whether, in our present argument, the qualification of legitimacy is necessary, because it can readily be shown that the methods we oppose are ineffective, apart from their legitimacy. To avoid any argument respecting what is and is not right, we shall consider the efforts put forth by labor organizations to improve their condition from the point of view of efficiency alone.

To the philanthropist whose sympathies embrace all classes, and whose range of intellectual vision is sufficiently extended to see the ultimate effect of each economical cause upon the interests of different classes of society, it must appear as a deplorable fact that almost all the organized efforts of the day, put forth with the object of improving the condition of the laborer through the action of economical causes, are really fitted only to injure the class they are destined to serve. If an economist were asked what artificial cause during the nineteenth century had most contributed to the poverty and suffering of the laboring class, his correct answer would be that it was the operation of the organizations known as trades unions. These bodies exhibit the singular spectacle of organizations framed for the purpose of gaining an imaginary advantage for themselves by doing a real injury to society. The mistake which they make may perhaps be best seen, not by the review we have already presented of the conditions of successful production, but by a more general survey of the requirements of the situation.

In order that the physical wants of the wages class may be supplied two things are necessary. The one is that the commodities necessary for their consumption shall be produced; the other, that they shall be enabled to purchase them. These requirements must both be fulfilled before any actual improvement can take place. The second condition is so limited by the necessities of the case that no artificial measures can materially affect it; it is therefore to the first that we must principally look. Those who really seek the interests of the laborer should make every exertion to increase the production of those commodities which are necessary to his comfort, especially food, clothing, and shelter. If there are forty millions of people to be supplied, and clothing for only thirty-nine millions is produced, one million must go naked in spite of laws and regulations. If clothing for forty-one millions is made, there will be enough and to spare. It may be replied that it does not follow that because the clothing is made the laborers will be able to get it. We join issue on this very point. All the clothing made is worn out by some one. What is not wanted by the wealthy is in some way disposed of to those lower in the social scale, and every one who considers it too shabby for his own wear sells it or gives it away. Not till so much worn that no one will take it at the price of rags does it find its way to some other use than that of clothing. Hence it is certain that the greater the quantity of clothing made, the more easily the poor will command it, and they certainly will not all command it if not enough is made. The same remarks apply to all the ordinary necessities of life. Hence the friend of the wages class should welcome every agency which tends to increase the production of those articles necessary to their comfort, and deprecate all public action tending to diminish it.

But what is the actual state of the case? Suppose that all the makers of clothing in a great city go on a strike and refuse to make any more clothing, hoping to force their customers by pure necessity to accede to their demands. Their action, however justifiable it may be, is detrimental to every man in the community who wears clothes, and the poorer he is the more injury it does him. But the labor organizations, instead of inducing the clothiers to resume work, will actually contribute

from their hard earnings to support the strike and thus make clothes scarce and dear. The shoemakers take similar action to make boots as dear as possible; the brickmakers to make houses scarce and rents high; the makers of furniture to lessen the number of chairs and beds; the tinsmith to enhance the price of the family tinware; the miners to diminish the supply of coal; while the unfortunate mechanic who has not struck work, shivering in his cold quarters, voluntarily increases his privations by contributing money to enable all these classes to increase the cost of everything he needs to make him comfortable!

It must be remembered that we are not now discussing the right of laborers and mechanics to strike for higher wages, but only the economical effect of such action on their part. Nor are we deprecating every reasonable effort on the part of laborers of every grade to adopt all proper and reasonable measures for securing the best wages it is possible for them to command. But because one may have a right to do an act it does not follow that that act may not be detrimental to himself, to his neighbors, or to society. We are simply showing the economical effect of certain measures apart from the question of their rightfulness or even their ultimate expediency.

The fact is that a strike is a kind of war waged against society. It is like every other war in its waste and injury, and differs only in the use of negative instead of positive instruments of destruction. When war is waged with positive weapons, the attacking party organizes himself at extraordinary expense and submits to great privation, for the purpose of inflicting as much injury and privation as possible upon his enemy, and thus compelling him to accede to the demand made upon him. It is the same with the striker. He submits to a loss of wages and to a deprivation of many of the necessaries of life for the purpose of inflicting a corresponding deprivation upon the persons who are in want of his labor and thus compelling them to increase his wages. The deprivation is inflicted not by destroying wealth already produced, but by hindering its production, which amounts to the same thing. This war is like every other war in that great damage is sustained by both parties and the victor gains his point not by offering some great advantage to his enemy in

return for a similar advantage, but by compelling him to share a state of mutual suffering.

We must therefore take a view of strikes similar to our view of war—as something which will on rare occasions be necessary, and in which we must at any time be prepared to engage, but which it is barbarism to enter upon without urgent necessity. If we seek for a readiness on the part of a community to engage in war corresponding to the readiness of our labor organizations to engage in strikes, we must go back to a barbarous state of society.

The wars of history are waged by well-defined powers, between whom, if the feud is to be serious or doubtful, there must be some approach to an equality of forces. The *quasi* war of our labor unions is one which our customs permit of small bodies engaging in with a fair chance of success. There is one feature in which this *quasi* war is different from all other wars common among men; namely, that the parties against whom it is waged include the very men who are waging it, who thus become the greatest sufferers through their own exertions. For instance, when the workmen of a shoe factory strike, their war is waged equally against every one who wears shoes, including all the members of other labor organizations and even themselves. It is the same with any branch of industry the members of which are engaged in the production of commodities necessary to the comfort of the laboring classes. So to find a parallel to the system we must seek for a state of society in which war is waged, not by injuring the enemy alone, but by indiscriminately attacking the whole community; for instance, by a warrior setting fire to all the houses within reach, commencing with his own, and doing an equal percentage of damage to everybody's crops. We must also imagine the attitude of those who sympathize with the strikers, and send them material assistance without actively engaging in the work, as that of men who are ready to aid and abet in the burning of their own houses or the decimation of their own crops whenever they find a friend to engage in the work.

One lesson to be drawn from this hardly needs to be insisted upon. The laboring classes are the greatest real sufferers through strikes, and the first efforts of the true philanthropist

should be directed toward doing away with them so far as possible. This is to be done by inculcating upon the laboring classes the general spirit of doing what every sensible man in the higher walks of life does; namely, working on the best terms he can command, and keeping employed on something, even if the return is small. There is not the slightest objection to each workman keeping in readiness to exact better terms from his employer whenever circumstances permit of his doing so without inflicting damage upon production. He should be well informed of the state of the market, and thus be able to judge when extreme measures will stand a chance of success. These should be resorted to only when success is nearly certain without a long contest and the employer has refused every reasonable arrangement. If it be replied that the operatives are unable to gain the information necessary to carry on the contest judiciously, this only shows the folly of their entering upon it at all. If they have the required information, and if it is once understood that they act only with a full knowledge of the certainty of success, their demands would carry a weight which is impossible under the state of things that now exists.

We are now in a position to examine the action of an economical cause which has not been adequately treated by the economist; namely, the influence of a contraction or inflation of the currency upon the interests of the laborer. The typical labor-reformer is an inflationist, and contraction or appreciation of the currency presents itself to him as a great evil. The reason is obvious. He knows that when the currency is contracted wages must be reduced in the same proportion or laborers must be thrown out of employment. He also sees that every addition to the volume of the currency will at once be payable in wages to his class, who will therefore be in greater demand.

To this the economist replies that neither the fall of wages in the one case nor the rise in the other has any important influence upon the condition of the laborer, because the price of the commodities necessary for his health and comfort rises and falls in the same ratio. This argument of the economist is correct under certain conditions. But a moral effect which the economist overlooks now comes in.

Let us suppose an appreciation of the current dollar. When this occurs a reduction of wages is unavoidable. If the laboring class had the good sense to submit to the reduction without a contest, all would be well. The fall of prices predicted by the economist would occur, probably before wages were actually reduced, and the comfort of the laboring classes as a whole would be unaltered. Of course different branches of industry might be unequally affected, but we are concerned only with the general average.

But instead of submitting, some classes strike. Those who are strong enough to exact the higher wages throw the weaker ones out of employment. A certain number of the producing class stopping work, a scarcity of commodities is the inevitable result, and the fall of prices is prevented because scarcity makes things dear. The more serious the contest which laborers make, the more effectually they prevent the cheapening of the products they should consume. Thus with one fraction of their number entirely unemployed, another fraction employed at reduced wages or in an uncertain way, and the necessaries of life as dear as ever, distress is the result and the pressure of hard times is felt by all. The worst of the matter is that great numbers will not be able to command even the limited wages corresponding to the depreciation of the currency, because the money which would naturally go to them is commanded by their stronger and more fortunate competitors. To take a simple example: if the current circulation should be reduced to one half, and one half of the producing class should nevertheless be able to command the same wages as before, the result would be that the other half would not simply be working at half wages, but would be out of employment entirely. Production being thus diminished in the same ratio, prices would keep up to the old standard.

Hence, in accordance with a law arising from the unreasonableness of human nature, a contraction of the currency always brings distress upon the laboring classes, for the simple reason that it makes them engage in a losing fight with circumstances. Of course the inevitable equilibrium is in time restored. The weak, compelled by want, commence work on very hard terms. Production is thus increased, prices fall, those who have been

able to command the higher wages are compelled to give way, and finally everything is restored to the equilibrium predicted by the economist.

The general conclusion which we must accept is that labor unions are the greatest foe to the elevation of the laborer himself. But in saying this we must not be understood to claim that the fault is all on the side of the laborer. In fact the latter are the weakest members of society, and it would not be an unreasonable or unjust claim to maintain that in every society the powers which actually shape it are the ones to be held responsible for defects. The general indifference of the educated public to measures having for their object the elevation of the wages class, by instructing them in the general principles of social well-being, must be looked upon as a potent cause of the abnormal state of things we have shown to exist. Our system of universal freedom and general education has sufficed to raise a storm, but no effort is made to direct or control it.

It is impossible within our present limits to enter upon a general discussion of plans of amelioration. There is, however, one objective point which can be readily brought out. The most potent bond of sympathy which now connects any large body of men is that formed by the organized labor unions of the country. This bond is, as we have shown, founded on no community of interests, but solely on a community of feeling, especially the feeling of antagonism to the more successful classes. Corresponding parts of different organisms sympathize more strongly than do the diverse parts of the same organism. We want to dissolve this bond and substitute for it the more natural one of common interests among those who work together as parts of one industrial organization, including laborers, managers, and capitalists. Let us take a factory, for instance. Here employers and employed, managers and operatives, have or ought to have a common interest in the success of the establishment. The more cheaply it is managed, and the more successful the disposition of its products, the larger the sum to be divided amongst the members of the organization. It may be replied to this that, since operatives receive fixed wages and the owners and managers assume all risks, it is impracticable to assign any interests to the operatives themselves. It is also

claimed, and with much truth, that the system of fixing wages is better for the laboring classes, whose limited income is thus assured even tho the owner should fail. But to produce the desired effect it is not necessary to form a complete co-partnership. What is wanted is not so much a pecuniary interest as a sympathetical one. The whole object will be effected when each operative feels that his employer takes a warmer and deeper interest in his (the operative's) welfare than any labor union does. How to make him feel this is not a difficult problem if those interested would earnestly set about its solution. A very small division of the annual profits of the establishment among the employés will do all that is necessary in the purely economical line. As a matter of fact, the plan is tried with entire success in many establishments here and abroad—establishments in which the employés would not think of turning against their superiors under any pressure whatever. We believe that the more carefully the problem is studied the more clearly it will be seen that the present state of feeling among the laboring classes is abnormal, and that the normal state of things at which we should aim is one in which community of feeling shall correspond to the community of interest among members of each industrial organism.

SIMON NEWCOMB.

SYMBOLIC LOGIC.

FEW persons can have read the "Laws of Thought" of George Boole for the first time without a feeling of bewildered admiration. Even if they had already attained some knowledge of the nature of the subject-matter of that remarkable book from secondary sources, they could hardly study the original without emotions of the kind alluded to. To those who read the book without such preliminary intimations the first effect was almost overwhelming, for it seemed as if some new mode of attaining truth was now for the first time set before them.

Such vague anticipations as these were not unnatural on the part of any whose mental training had been mathematical rather than philosophical, especially if, as was very likely, their logical knowledge was limited to Whately. A very little reflection, however, would suffice to remind such hopeful enthusiasts that tho sound logical principles are essential to any steady progress in speculation, yet actual logical processes are generally of very subordinate importance. Logic and mathematics offer a wide contrast in this respect. In the case of the latter we frequently find ourselves stopped short by difficulties of pure calculation. We may have the data fully set out before us, and know clearly what we want to elicit from them, and yet find the problem hopelessly insoluble with our present resources. As regards logic, on the other hand, it may be doubted whether any human being is ever baffled by purely logical difficulties in serious speculation. It is in the collection and management of our data, and their reduction to propositions or premises, that our real difficulty is found. When this is once secured, the steps to the conclusion are generally as few and simple as those in the case of mathematics may be many and intricate. Were this

otherwise—were logic as an instrument at all commensurable with mathematics as an instrument—there can be little doubt, I think, that Boole's work would have been universally recognized as marking an era in Speculation; for the person who attempts to solve a really intricate logical problem by the common methods must feel himself in a similar position of relative helplessness as he who should try to determine the area of a curve without the integral calculus. Those who did make use of the new method would soon prove, by the results obtained, that those who did not make use of it were being hopelessly left behind.

But tho there are these drawbacks to the practical advantages of such an improved logical method as the one in question, its speculative importance is still very great, and every one who feels an interest in the theory of our reasoning processes ought to possess some general acquaintance with its nature. Unfortunately there is a good deal of prejudice to be surmounted here. Abstract reasoning can never be really popular, and this particular subject is fenced in, so to say, with a double rail.

What with the logicians who hate mathematics, and the mathematicians who despise logic, a theory of so-called mathematical logic does not find many friends. This is the prejudice which it is attempted here to remove. I shall endeavor to show that there is nothing in Boole's logic which can properly be called mathematical; that it is simply a generalization of very familiar logical principles, with a certain necessary shifting, however, from the ordinary point of view; and that every process and symbol with which we need be concerned admits of a strictly logical interpretation.

In the first place, why do we entitle this subject *Symbolic Logic*? Is not all logic symbolic? Undoubtedly it is, but the extent to which we employ symbols in one system and the other is so different that this really becomes one of the most obvious determining characteristics. The main distinction is this: that whereas the common logic uses symbols for *classes*, and for hardly anything else, we shall make equal use of symbols for *operations upon these classes*. Every one knows how we commonly make *x* and *y* stand for the subjects and predicates of our

propositions. Such symbols as these we shall also employ; slightly altering their definition, however, and greatly extending their range; but the main point of departure from the common view will be the employment of symbols to express all the logical processes which we have to make use of. The fact that we do this, and still more that we find it convenient to adapt the peculiar symbols of mathematics to our purpose, has given rise to the impression (an unfounded one, as I hope to show) that such a system of logic *is* a branch of mathematics.

What we have to fix our attention upon here is the nature of a logical class, and the way in which classes may be related to one another. As regards the former of these—viz., the conception of a logical class pure and simple, apart from its relation to other classes—it is not necessary to say much, since that conception is already tolerably familiar. In fact, what we have to do here is rather to simplify the ordinary logical account of a class of things, by divesting ourselves of various associations which the common view insists upon, than to complicate it by adding others. All that we can recognize in a term is its *denotation*; that is, the things for which it stands: to us the class must consist solely of the things which make it up. The connotation of the term—that is, the attributes which characterize the members of it—are no concern of ours. We call attention to this point here in order to impress an important caution upon the reader. This symbolic logic is not, as is sometimes supposed, to be regarded as a sort of claimant for the post of the ordinary logic. If any writers have intimated that the latter is to be superseded, they have made a grave mistake. For all educational purposes,—for the training of ordinary thought,—the traditional rules, definitions, and distinctions are of inestimable value. Employing as they do the propositions of ordinary life, they meet the difficulties of thought very nearly on their own ground. They remedy just that kind of blunders which the shrewd but uncultivated mind would be most likely to commit. The function of symbolic logic, on the other hand, is very different. Its path, so to say, is narrow but indefinitely long. Before it can take account of a proposition on reasoning it has to transmute it not only into its own symbols, but, what is more important even than this, into its own conceptions and ways of

regarding things. When this is done, its power over its data is incalculably superior to that gained by the old method.

We will start then with the assumption that we can represent the extent of a class of things by a symbol or letter; that, *e.g.*, we may put x to stand for the class of lawyers, y to stand for that of English, and so forth. Now conceive the question to be asked, In how many distinct ways can classes be combined or in any way related to one another? It is to be a purely logical inquiry, remember. If the reader happens to know beforehand that we mean to employ certain mathematical symbols for the purpose of representing the conceivable modes of relation of these classes, he must not suppose that we borrow also the *processes* from the mathematicians. We shall go as far as we can without even borrowing a suggestion from them as to the number and nature of these processes. Approaching the subject thus without prepossession, as far as possible, we should doubtless see our way quite clearly to three such mutual relations of classes.

I. In the first place we certainly want to combine classes in a way which it is hard to keep from calling at once their *addition* to one another. Having in view the three classes of clergy, lawyers, and doctors, we may want for certain purposes to throw them into one, by terming them the learned professions. This is not strictly addition, but it is so nearly addition that no one would object except upon some ground of principle to our using the sign $+$ to indicate this process. In saying that this is very nearly the same as addition the important point to notice is this: the order of arrangement of the terms is indifferent. Whether we speak of lawyers, doctors, and clergy, or clergy, doctors, and lawyers, the aggregate class is unchanged. We will say then that x , y , z representing these three classes, some such expression as $x+y+z$ shall stand for the aggregate class.

II. Again, we want to combine classes in the way of *subduction*, or *exception*. From the class of lawyers generally we may want to omit a subclass, say those who are barristers. This again is so very nearly the same thing as common subtraction that we are naturally tempted to take the sign $-$ and see if we cannot work with it, representing the "lawyers except barristers" by some such sign as $x-y$.

Here we are at once met by some difficulties. Can we "except" from a class that which is not included in it? Certainly not. Accordingly the word is invariably understood to be limited in its application by the words, or some of the words, which have preceded it. If we hear of "lawyers omitting graduates," we interpret it at once as equivalent to "lawyers omitting those lawyers who are graduates." But this sort of conventional correction of our terms will not do where symbols are concerned; it is absolutely essential that their signification should be precise and invariable. Accordingly $x-y$ will not be admissible except upon the assumption that y is part of x , which leads, as will presently be seen, to some important modifications. Again, can we "add" without counting the common part, if such there be, twice over? It is quite certain that the words "and" and "or," when used thus to aggregate classes together, are conventionally understood to avoid such duplication; that is, the phrase "knaves and fools" does not take the knaves who are fools twice over. It is equally certain that our logical system must avoid doing this; that we must never let it be supposed that $x+y$ counts the common part (if there be one) twice over. Now how is this end to be achieved? There are two methods in vogue: one which we may term the strict method introduced by Boole, and the other a looser method introduced by Prof. Jevons. In the former case we mark the distinctness, or mutual exclusiveness, of our classes *formally*, by expressing it as " x and the y which is not x ." In the latter such avoidance is understood rather than expressed. We there say once for all that " x and y " is to be interpreted as not interfering with one another in respect of x and y , however much the two terms separately considered might trespass on to each other's ground. For reasons which cannot be fully given here we shall adopt the former or strict plan.

III. There is still a third-class relation with which we have perpetually to be concerned in logic and the discourse of common life. It is a process of class restriction, which consists of confining our attention to the common members of two or more classes. When we use the two terms "English lawyers," what meaning exactly do we intend to convey? Many various interpretations can be given, according to the nature and degree

of analysis, psychological or logical, which we adopt. But it is quite certain that one account, and that a correct one, is given by saying that we are forming a new class by omitting all but the common members of the two given classes. To obtain the "English lawyers" we take all the members to be found in either class, and omit all but those common to both. That is, it is a process of what may be called class restriction. Here it is plain that we have got on to a process which is by no means so nearly coincident with any mathematical process as was the case with the two former kinds; viz., those of class aggregation and class omission.

It may seem a rather bold step, therefore, to say, Let us indicate this by the sign of multiplication. And yet a minute's observation will show that we can do so safely up to a certain point. The main symbolic characteristics of the sign of multiplication are these two: that the order of the terms is insignificant, xy being the same as yx ; and that we must apply the multiplier to every detail of the multiplicand; viz., that $x(y+z)=xy+xz$ and $(a+b)(c+d)=ac+ad+bc+bd$. Does this hold in logic? for if so, it will be an encouragement to go on. It does, according to recognized laws of grammar and necessities of thought. Thus "the poor, whether they be honest or dishonest" means "poor honest, and poor dishonest;" "young and old soldiers and sailors" is exactly equivalent to "young soldiers, young sailors, old soldiers, old sailors." These commutative and distributive characteristics, as they are termed, hold therefore in logic and mathematics alike. But we soon see that in one direction we must abandon our mathematical laws. The repetition of a symbol in logic leaves the sense unaltered: we must insist upon it that xx shall be the same as x , because for instance "lawyer lawyer" means the same as "lawyer." Is this admissible? Certainly it is, for the very good reason that we are not proposing to *multiply* our terms, but only to use the sign of multiplication for a quite distinct process, and one which is purely logical. There is nothing inconsistent in saying, Use the sign of multiplication for expressing class restriction, and use it exactly as you do in mathematics, with the one exception that xx shall = x ; and it will answer every logical purpose.

So far is a matter of definition; now we come to one or two

that are matters of consistency. Suppose it be inquired how we should represent "all," or the universe of things in general contemplated by logic? We shall find ourselves bound to represent it by *unity*, or 1. On the following ground: The class x is what is common to x and to "all;" it is "all x ." Hence since $x = 1x$, 1 must stand for "all" and is the only sign with which we can work harmoniously in that signification. That 0 must stand for nothing the reader will readily infer, and practice will confirm his surmise. Another conclusion also follows in consistency. The contradictory of x , or not- x , must be represented by $1 - x$, for it is "all except x ." The obvious symbolic expressions for the facts respectively that everything must be either x or not- x , and that nothing can be both x and not- x , are, that $x + x1 - x$ makes up unity or "all," and that $x(1 - x)$ or $x - x$ is equal to 0, or nothing.

One more sign demands a moment's notice. This is the sign for equality, or $=$. In mathematics, as every one knows, it does not indicate entire identity of the things which it connects, but rather identity of number of units of some kind. But in logic this sign ($=$) means absolute identity of the individuals designated by different terms. Thus $x = y(1 - z) + (1 - y)z$ states that the individuals marked by the name x are *the same as* the aggregate of the individuals marked by the names y ($1 - z$) and $(1 - y)z$; or, in words, that the x 's are the same as the things that are y and not- z , and z and not- y .

The point we have now come to is this. We have observed and distinguished three different but extremely familiar class operations, which we have respectively described as aggregation, omission or exception, and restriction. They are purely logical operations without resort to which no one can speak consistently for one minute on any subject whatever. But we have found that they could be conveniently represented by well-known mathematical symbols. The first two were closely analogous to addition and subtraction, the third was remotely analogous to multiplication. The signs + and - would apply without restriction to the former, and the sign \times with a single important restriction to the latter.

Here then a question arises. Is there any *fourth* logical operation which ought to be put on a par with those three? It

is impossible not to think of *division* and its sign, when we have thus borrowed signs from addition, subtraction, and multiplication. That common people feel no want of such, and that even the logician has not yet found a place for it, is so far against its introduction ; and yet a little consideration will show that there is a place, and an important place, for it. But let there be no mistake about our attitude towards it. We do not say, Adopt the sign of division and see if you can make any logical use of it. There is no need to take the initiative thus from the mathematicians. What we say instead is this: Keeping strictly to the field of logic, see if there is an *inverse* operation to that class restriction which we denote by the multiplication sign. If there is, then we have a sign ready at hand to denote it, and by which indeed we should be bound in consistency to denote it ; viz., the sign of division. We shall thus keep wholly to the sphere of logic, and the borrowing a sign for convenience from another science, we shall put an interpretation entirely of our own upon it.

Now there *is* such an inverse operation in thought. Remember the nature of what we have called restriction. By xy we mean the result of restricting x by y , or y by x ; that is, of taking only their common part. Now conceive such a process as this: find a class such that when it is restricted by y it shall become x .

Such a class will, in consistency, be indicated by the symbol $\frac{x}{y}$.

This expression is very commonly regarded as uninterpretable. It would certainly be so in logic if it meant "divide x by y ," just as xy would be uninterpretable there if it meant "multiply x by y ." But when we take them as significant of simple logical operations which are respectively the inverse each of the other, and which we find it convenient to represent by familiar mathematical signs, all becomes plain.

It will very naturally be asked here why this fourth process of class determination is so little appreciated ; or rather whether we have any occasion at all to resort to it ? The answer must be admitted that in common thought it does not often present itself, and that even in the common logic we find but faint traces of it. But this, we apprehend, is owing to the fact that easy as it is to grasp such a conception by the aid of our symbols, it is by no means easy to see what it means without such aid. We

will take an example to show by what sort of course we might be led up to it, purposely selecting one of the simplest possible. Suppose it were accepted as a definition that "Peers are English aristocrats," and it were inquired, What then are aristocrats in general, in terms of "Peer" and "English"? Putting x, y, z , respectively for English, aristocrat, and Peer, our formula would stand $z = xy$, expressive of the fact that the class z just coincides with the common part of x and y . Now when we ask what an aristocrat is, we are inquiring what is that class which when restricted by "English" shall become "Peer." Here then we have a suitable symbol ready to our hand; borrowed as a symbol from mathematics, but bringing no interpretation from that science with it, beyond the fact that it is to represent the inverse of the sign \times . That sign is the sign of division, and we should therefore consistently write down the symbol for "Aristocrats" under the given conditions, as $\frac{z}{x}$. When, therefore, we meet with such an expression as $z = xy$, we are entitled to go on along the familiar mathematical path so far as to write also, $\therefore y = \frac{z}{x}$.

But here we must stop on that path; we must not assume that we may simplify any such expression by striking out common factors, when they exist, from the numerator and denominator. The right to do that could only be admitted if we had accepted all the laws of multiplication, and this we have not done; for we have laid it down that with us the exceptional rule must hold that $x = x^2 = x^3$, etc.

So much for the four kinds of class combination. We must now go on to give some account of the most characteristic process of the symbolic logic, viz., that of Development or Expansion, as it is commonly called, but the nature of which is better understood by calling it at once Subdivision of classes. Every one knows what is meant by *dichotomy* whether he has already met the word or not. It expresses the fact that every class must be divisible into two parts, x and not x , whatever x may be and whatever the class may be; and that these two parts must be mutually exclusive and collectively exhaustive. The division is a purely formal one, by which is merely meant that we do not assert that either of these two classes in particular must be

actually represented, tho we know that one or other must be. "Man" is divisible into French and not-French; but he is also divisible into mortal and immortal. In the former case both classes are observed to occur in the world, in the latter only one. But in each case we can lay it down with *a priori certitude* that as a division such division is exhaustive and its elements are mutually exclusive.

Now all that we shall do with this symbolic development is to apply this same conception—so familiar in the case of one term—to two, three, or any number of terms, and this directly and at once. Our method, in fact, is to start with all the possibilities, and then ascertain which of them are actualities. Given two terms x and y , these possibilities clearly are that a thing should be either x and y , x and not- y , y and not- x , neither x nor y . This is expressed symbolically by the equation $xy + x(1-y) + (1-x)y + (1-x)(1-y) = 1$. Were there three terms to be reckoned with we should obtain 8 possibilities; 4 would yield 16, and so forth, the number doubling with the introduction of every fresh term. These are the possibilities, but, as already remarked, the actualities will fall short of this; for it is only "all," or the logical universe of discourse, as it is called, which will thus break up into every one of these divisions. Any narrower class will only yield some, more or less as the case may be, of such subdivisions. If, for instance, we had had the class $x + y(1-x)$ proposed to us, we should find that of the four admitted possibilities one was missing, viz., $(1-x)(1-y)$, so that it would split up into three only, $xy + x(1-y) + (1-x)y$.

For instance, let us suppose that three persons, A, B, C, were set to sort a heap of books in a library. A is told to collect all the English political works and the bound foreign novels; B is to take the bound political works and the English novels provided they are not political; and C the bound English works and the unbound political novels. It is then inquired whether any works are thus assigned to two of them in common, say A and B, or any to all three? Put a for English, b for political, c for bound, and d for novels; so that $1-a$ stands for foreign, $1-b$ for non-political, and so forth. (We suppose, in the absence of any contrary statement, that these four terms are independent, so that they may be anyhow combined.) Then the three assign-

ments will be respectively represented thus: To A is assigned $ab + (1-a)cd$; to B, $bc + (1-b)ad$; and to C, $ac + (1-c)bd$. By putting our statements thus into symbols, we have already made one good step towards perceiving their mutual relations, but it is only when we take the next step that we can feel quite sure. Develop A's share, first by subdividing ab into its four elements yielded by the four possible combinations of c and d , not- c and not- d , and then by dividing $(1-a)cd$ into its two elements—viz., its b and its not- b parts—and it resolves altogether into six of these elementary parts. Similarly B's share also resolves into six. On comparison of these we should find that they *have* something in common, and that this is represented by $abc + (1-a)bcd$. That is, we have assigned to both A and B the class of books describable as "bound political works, whether English generally or foreign novels." So by comparing the three shares of A, B, and C, we should find that to each of them is assigned abc ; viz., the "bound English political" works.

This is one way in which the development of a class expression may prove serviceable, but it is far more potent and useful in its application to logical equations; that is, to propositions. Suppose, to take another simple example, that we had the three following rules set before us: The Financial Committee shall be chosen from amongst the General Committee; No one shall belong to both the General and Library Committees unless he be also on the Financial; None of the Library Committee shall be on the Financial. Such rules might very easily have been drawn up by some club. Now let it be asked whether these rules stand already in their simplest and most harmonious form? (Lecturers on logic will find it an interesting experiment to test a clever class who have only learnt the common logic by such an example which, symbolically, must be ranked as a very simple one indeed.) Put x, y, z to stand respectively for the Financial, Library, and General Committees. Our data may be stated verbally: "All x is z ," "all yz is x ," "no x is y ;" and may be written down symbolically: $x(1-z)=0, (1-x)yz=0, xy=0$.¹ On developing these, as in the last example, we find that the first and third are redundant, taken together, for they both in-

¹ Had our object been brevity of procedure, we should have "multiplied" the class expressions as they stood. For just as xy means what is common to x and

volve the same elementary denial; viz., that of $xy(1-z)$. In other words, they both tell us that there can be no such class as $xy(1-z)$, or "Financial and Library, but not General." If this redundant element be omitted from the third rule, and the remainder added to the second, we find that it stands simply as $yz=0$. That is, the whole force of the three is given by the two, $x(1-z)=0$, $yz=0$, or "All the Financial are on the General, and none of the Library are on the General."

The principal reason for the power thus possessed by this process of development is in no way mysterious. It is nothing more than a particular case of the very general truth that if we want to understand and compare, we must begin by analyzing. It is impossible for any mind, however acute, to see the mutual relations of complicated class terms and equations when looked at in the gross, but when broken up into their ultimate elements such comparison is often effected almost at a glance.

Before proceeding to describe any other rules and processes, it will be convenient here to insist upon a peculiarity of this system in respect of the view which it adopts as to the import of propositions. This is the more necessary because there is a very general tendency to suppose that propositions must mean the same thing on every system, and that therefore any classification, such as the familiar A, E, I, O of the common logic, would fall into its place as readily on any other scheme. This is a serious error. The view which the common logic takes of the nature of a proposition is that there is an essential distinction between subject and predicate. In the former, or subject, we think of an individual or class of things; and in the latter, or predicate, we assert or deny certain attributes of that subject. In a symbolic scheme, on the other hand, we recognize no distinction whatever between a subject and a predicate, for an equation is absolutely unchanged whichever end we choose to put first.

But there is another point of difference, much deeper and much more important in its consequences than this. The reader

y , so $(ab + (1-a)cd)(bc + (1-b)ad)$ means here what is common to the share of A and B. Multiply out, remembering that $a(1-a) = 0$, $b(1-b) = 0$, and the desired result is obtained in a couple of lines.

will remember that we started with the conception of a scheme of subdivision represented symbolically (when only two terms are taken into account) by the following equation: $1 = xy + x(1-y) + (1-x)y + (1-x)(1-y)$. This we must regard as a sort of framework which may be variously filled in, and each mode of filling it in yields a distinct proposition. We may term this view of propositions the *compartment* view in distinction from the ordinary or *predication* view. It is not proposed to supersede the latter, or to imply that it is not a correct view; all that we say is that each is a tenable account, and each has its appropriate place and function. For common and educational purposes the former is mostly preferable, but whenever we want to unravel intricacies and deal in generalities we seem forced to adopt the other.

Well then, having got this framework for all possible propositions, what can we do with it? Anything we please in the way of filling and emptying its compartments, subject to the one solitary exception that we cannot suppose every compartment empty. This (which would lead to the absurdity $1=0$) is barred by the very nature of our scheme, which is exhaustive; for, not- x and not- y composing subdivisions, it is clear that everything must find a place somewhere in such a scheme. See, for instance, what would be indicated by simply emptying out one selected class, say xy . This means put $xy = 0$, and indicates that there is no xy , or that "no x is y ." But the emptying of $x(1-y)$, as given by $x(1-y) = 0$, says that there is "no x which is not y ," or, in common phrase, that "all x is y ;" *i.e.*, this clearance leads to an affirmative proposition. Similarly, $(1-x)y = 0$ leads to another affirmative, "all y is x ." Whilst $(1-x)(1-y) = 0$ yields the comparatively unfamiliar form "no not- x is not- y ," or "everything is either x or y ." Now these are clearly the four propositions which we should have to pick out as the four simplest on our scheme. Nothing could better serve to show the contrast between our symbolic system and the common logical account than the comparison of these four with the traditional A, E, I, and O.

This is one characteristic. Now notice another, which is extremely important from the light which it serves to throw upon

a vexing question in the common theory. If any ordinary logician were asked whether, when we utter the proposition "all x is y ," we distinctly imply that there are x 's and y 's to be found? —he would perhaps be somewhat puzzled, and very likely reject the question as trifling. But on reflection he will see that the rules of the syllogism compel him to admit that the subject of the universal affirmative, at any rate, is actually represented; for "all Y is Z ," "all Y is X ," could not yield "some X is Z " (Darapti) if any doubt were admitted as to there being really any instances of Y to be found. So much is clear; but having been once dragged into this admission, the logician will find that he has no peace on this point, and that questions far too numerous to mention here will be continually put to him. The same admission must clearly follow in respect of the subject of the particular affirmative. But does it follow in respect of the predicate also? Yes, for otherwise he could not convert a proposition. And with negative propositions, both subject and predicate? Yes again, for otherwise he could not contraposit and convert. It would seem therefore that he is, or ought to consider himself, hampered to this extent: that before he can make any assertion whatever, he must make sure not only that both subject and predicate are represented in reality, but also that they are *not* represented; *i. e.*, that there are things which do not belong to them, not only in existence, somewhere, but even within the sphere of our discourse. And this is but the beginning of trouble, for the same questions would be repeated in reference to more complicated propositions, such as "all XY is Z ," " X is either Y or Z ," and so forth.

The principles of the symbolic logic seem to offer, indeed to force upon us, a ready escape out of all these difficulties. But they do it in a very curious way. They set before us a two-fold interpretation of every proposition, one positive and the other negative, and they tell us that it is the latter only which is unconditional in its signification. The simplification thus produced may not be at once apparent, but will be seen by consideration of one or two examples. Recur to our standard two-term formula, $1 = xy + x(1-y) + (1-x)y + (1-x)(1-y)$. We saw that "all x is y " was represented by $x(1-y) = 0$. But the blotting out of this class thus absolutely, leaves three remaining

open for occupation. We know for certain that there can be no occupant in $x(1-y)$, but we cannot tell in which of the three remaining ones any may be found; in fact, we can tell nothing except the "formal" fact that there must be occupants of one or other of those three, possibly of all of them.

Now apply this to the question just discussed. What it means is this: that "all x is y " decides nothing as to there being any x or y , but it does decide unconditionally as to there being nothing which is " x or not y ." That is, the customary or positive interpretation of "all x is y " must be regarded as leading only to a hypothetical meaning; it is the negative interpretation which is really unconditional. The former can be amplified into "there may be no y , and no x even if there be a y ; but if there be an x then there must be a y ;" the latter says distinctly "there is no x which is not y ." Now we do not think of proposing that such an interpretation as this should be substituted for the common view, or rather lack of view, but as an explanation of complicated propositions the simplification which it entails is very remarkable. It would be exceeding the limits of a general essay like this to discuss this question minutely, but two of these advantages must be briefly noticed, as follows.

One merit is the power we thus acquire of reconciling and combining propositions which are in the customary sense of the word contradictory. Take the extremest case possible within the common logic: "all x is y ," "no x is y ." If these were offered together to a logician, he would very naturally reject them as contradictory nonsense. But the symbolist need not do this; for, since "all x is y " implies $x(1-y)$, and "no x is y " implies xy , and these are distinct compartments, he can detect no shadow of a contradiction here. All that has been done is too clear out every possible x , and he therefore interprets the proposition as signifying "there is no x "—whether or not there is a y of course he cannot tell. Now, tho this enlarged power of interpreting propositions does not matter much in such a case as the above, yet when we are dealing with propositions a little more complicated it becomes of the utmost importance. Suppose we had the propositions, "all xy is z ," "no xy is z ." As thus proposed, the common logic could make nothing of these any more than of the above simpler ones. But when

we accept them under the same interpretation we just read them off as stating that "no x is y ," for this is the equivalent to "there is no xy ." Multitudes of examples could readily be offered which admit of a simple and obvious explanation when thus treated.

The other merit of this interpretation is shown not so much in extended powers of accepting propositions, as in the practical facility of grappling with them when we have got them before us. This rests upon the truth already adverted to, that the only way of dealing with complicated propositions is to proceed by analyzing them into their details. Now, if a group of apparently contradictory propositions be set before us, we have, so long as we adhere to the affirmative side of interpretation, no ready means of combining them and eliciting their possible solution. We should have a mere riddle to guess at rather than a problem with a recognized procedure of attack; because every one of the group is, so to say, at the mercy of the others: we cannot tell how much of their apparent claims each may have to forego. But take the negative import of each; resolve each, that is, into all its elementary denials, and every step we take is sure, for such denials are unconditional and independent. When once we can thus resolve our procedure into a succession of simple stages, of which we know that we shall not have to undo any or retrace our steps, we feel that we are on the right line of attack, and that almost every problem is then conquerable.

We cannot give rules here for thus breaking up a proposition into all its elementary and unconditional negations, but must content ourselves by indicating how it is done in a simple case, and illustrating its advantages by an example. Let us take $x=y$, or, in Hamiltonian phrase, "all x is all y ." The blemish in this (its affirmative) import is that it does not positively commit itself to the existence of an x or a y , but merely maintains that if there be one there must be the other; that the classes are in that case identical. But resolve it into its negations, and we find that it says, "there is no x that is not y ," "there is no y that is not x ," $(x(1-y)=0, y(1-x)=0)$, and to these denials it will stick without fail. Now take the following group of propositions: "all x is either y and z or not- y "; "all xy , that is z , is also w "; "no wx is yz ." None of these propositions could be called really

complicated, and we might readily compose a concrete verbal example to fit them. Moreover, the solution itself is as simple as can be; viz., "no x is y "; for this is the outcome of the given propositions, and is all that is needed to harmonize them. But it would be almost hopeless to try to work this by the common methods; and if we did, we should be pulled up sharp by what with them is a flat contradiction. For "no x is y " is the same as " xy is nothing." Now xy is part of the subject of the second proposition, and propositions with a non-existent subject have, or are supposed to have, no interpretation on the common view. So nothing apparently could be done with such a group, though in strictness they do not really involve any insoluble contradiction; as we have pointed out.

We have thus called attention to one or two of the main characteristics of this symbolic logic. Brief as our account has been it will serve, we hope, to explain and justify the summing up of the principal merits of the system which we now offer in conclusion. One of these merits, and far the most obvious at first sight, is that of *power*. That problems can be successfully attacked by these methods which would utterly baffle the acutest minds when confined to the ordinary methods, or to common sense, seems too indisputably clear to need formal proof. The examples which have been offered in the early part of this essay are very elementary ones for a symbolic system, but we venture to say that if they be submitted to an ordinary class of logical students the result will be somewhat like that of using bows and arrows against a modern fort. This access of *power* is sometimes attributed by logicians who admit its existence to a sort of unholy compact with the powers of mathematics. As already remarked, I cannot agree with this opinion, but prefer to admit no process and no result in our system which would not be equally admissible in common logic, and describable in common language.

The real reasons why we can do so much more, and do it so far more easily, are not difficult to detect. One important cause is to be sought in the device of substituting the unconditional negative interpretation of propositions for the intricately conditioned affirmative interpretation. As already remarked, this enables us to break up a complicated problem,

which would be hopelessly insoluble as it stands, into a succession of steps which are not only comparatively easy, but which we know we shall not have occasion to reverse. Beyond this the advantages are those of symbolic language in general. We define our terms and signs for ourselves; thus escaping the fluctuations and ambiguities of common language. We are free to stick to our adopted meanings in defiance of the implications and associations of common language and of the laws of grammar. A single brief symbol will represent aggregates of terms and operations which would demand a whole paragraph to explain in ordinary language. But such advantages as these are too well known to every student to need enumeration here.

Impressive, however, as is the power which these methods are able to confer upon us, it is not here, I think, that the philosophic logician would seek the principal merit of a symbolic system. It should rather be looked for in the wider grasp which it gives us of the familiar principles of the older system; in its enabling us to sit loosely to restrictions which are merely artificial and traditional; to detect the germs of processes and characteristics which when generalized become of great importance; to decide between rival views on broader grounds than those furnished by the slender data of the old system; and so forth—in fact, to put the logical student into the same sort of position that he who has studied analytical geometry feels when he goes back to his Euclid. We will briefly indicate some of these advantages.

For instance, the mere habit and capacity of generalization is surely worth a great deal. The common syllogism may be described as being a solution of the following problem: "Given the relations, in respect of extension, of each of two classes to a third, as conveyed by means of two propositions, find the relations of the two former to one another." We do not maintain that this is the only, or even the best, account of the process, but it is certainly *an* account. Well, the general problem of which this is a very special case may be stated thus: "Given any number of propositions, of any kind, and involving any number of terms, find the mutual relations to one another, in respect of their extension, of any selection and combination from amongst all these terms to any other such selection." If

this be correct, the man who knows the generalized form will surely be better able to appreciate the specialized and more familiar form. Again, the syllogism is a case of elimination as well as of inference; that is, we know that we thus get rid, in our conclusion, of one term out of the three involved in our premises. Here the corresponding general problem would be to ascertain whether there is any limit to the number of terms which can be eliminated from one proposition, or from a group of propositions, and to lay down general rules for such process of elimination.

A wide generalization sometimes assumes so unfamiliar an aspect to those who were only acquainted with a specialized form of the process, that the realization of it may amount almost to a new conception. Thus we all know what a step it is to most beginners to extend "weight" into "universal gravitation." Something of this sort occurs in the case of that inverse operation which we indicate by the use of a fraction. What is called by the logicians "accidental conversion" is a very narrow and special instance of this operation. Given "all X is Y ," what is known about Y in relation to X ? The usual answer, that "some Y is X ," when interpreted in terms of extension may be seen to amount to this: that the class Y must certainly include all X , and may possibly, for aught we know, include anything else besides. Differently worded, this is that inverse process already mentioned, for it is equivalent to saying, "Find a class, in its widest extent, such that on restriction by X it shall just reduce to X ." Now this is a very narrow case of a very wide operation, which may be generalized as follows: Express, in all its attainable detail, the extent of a class such that on restriction by some assigned class it shall be reduced to some other assigned class; the two latter not being simple classes, like x and y , but anyhow composed of any number of logical terms.

These generalizations may often be profitably studied among *limiting* cases; that is, by pushing general rules to their extremest bounds and then seeking for an interpretation of them there. Every mathematician knows how profitable this exercise is in his own department, but there has been so little resort to it in the field of logic that one would almost think that the

popular prejudice against "pushing rules too far" had been accepted here. But much may thus be learnt in logic, and it is difficult to learn it except by the aid of pure symbols, for the forms of common language are apt to rebel altogether against what they regard as an abuse. We had a case of this in the harmony of the two propositions "all x is y ," "no x is y ," provided we admit that $x=0$. Within the limits of the ordinary logic it would be difficult to make an objector believe that we were serious here, but we can readily see that when we come to treat such propositions as "all xy is ab ," to say nothing of more complicated ones, such an interpretation is forced upon us.¹ Instead of simplifying our rules by its rejection we should render them hopelessly complex.

The generalizations thus referred to are but one or two selected out of many. What objection can be urged to the suggestion that those who are able thoroughly to understand logic in its common form should also go on to study it in the light of these extensions? Whatever objections we may urge, do not let us rest our rejection on the ground that the discussion of these questions does not belong to logic. Say, if we like, that such problems are insoluble; say, if we like, that they are so simple that they may be solved by the traditional methods; say, if we like, that they are frivolous and useless (being agreed that the syllogism and its rules are useful); but do not let us maintain that they are not logic.

They belong to logic by a double right, both positively and negatively. Positively they belong to it because they are simply a generalization of processes of which that science is universally admitted to take cognizance. No line can be drawn dividing off the problems of ordinary logic from those of the symbolic. They merge insensibly into one another; and if the latter is to be rejected because its processes admit of resolution into, and

¹ I once procured some strawberry plants which it was admitted by the vendor did not bear many fruit. But I was assured that they would just make up in their size what they lost in their number. (He gave me unconsciously the hyperbolic formula, $xy=c^2$, for connecting these two elements.) When summer came no strawberries appeared. I did not complain, for I saw that the nurseryman would maintain that the size of the non-existent berry was infinite, which I did not see my way to disprove. So I let it be, feeling that it was my own fault for not having barred zero values of either variable.

performance by, the rules of the former, the former might as well be rejected because its processes admit in turn of analysis into simpler and more ultimate mental acts. And, negatively, such problems cannot be relegated to mathematics, which is presumably the only science in favor of which any plea could be urged. They have really nothing to do with number, or magnitude, or shape, or direction, as such; limits which we may take as practically indicating the boundaries of that science. There is no more of the estimation of any kind of unit than there is in the syllogism. They can be so stated as to involve nothing whatever but the mutual relations of various class terms in the way of inclusion and exclusion. To admit that the syllogism belongs to logic, but to urge that such problems as these belong to mathematics, would be like saying that addition belongs to arithmetic, but that multiplication is a part of astronomy.

JOHN VENN.

HERBERT SPENCER'S THEORY OF SOCIOLOGY: A CRITICAL ESSAY.

THE term *Sociology* was invented and adopted in its French equivalent by Auguste Comte in his "Philosophie Positive." It makes its first appearance in the following sentence: "After Montesquieu, the next great addition to *Sociology* (which is the term I may be allowed to invent, to designate *Social Physics*) was made by Condorcet proceeding on the views suggested by his illustrious friend Turgot" (b. vi. chap. ii.). The term *Social Physics*, also used by Comte as its equivalent, is significant, suggesting as it does the materialistic theory of man which Comte takes no pains to conceal. For according to his teachings, the higher nature of man is simply the result of a more highly organized brain, and the psychical and social phenomena of humanity depend solely on the quality and conditions of cerebral activity. On such a theory it is very clear that the science of the phenomena of man in society should, with the strictest propriety, be styled *Social Physics*.

So far as Comte's theory of science will allow, as being limited to the knowledge of phenomena and the relations of similarity and succession,—recognizing neither forces, causes, nor ends,—his treatment of this science is very temperate, and abounds in many just observations in respect to the operation of many of the agencies which affect man's social status and progress. He recognizes very distinctly the extremely complex nature of the problems which are to be solved, and the difficulty of determining all the elements which enter into the several products, as also the relative importance of each. The single point of view from which he regards society is that of biology, and through this science he explains all the higher phe-

nomena which pertain to man. He quotes with approbation the pregnant sentence of Pascal: "The entire succession of men through the whole course of ages must be regarded as one man, always living and incessantly learning." To this he adds: "The whole social evolution of the race must proceed in entire accordance with biological laws; and social phenomena must always be founded on the necessary invariableness of the human organism, the characteristics of which, physical, intellectual, and moral, are always to be essentially the same and related in the same manner, at every degree of the social scale—no development of them attendant upon the social condition ever altering their nature in the least, nor, of course, creating or destroying their nature in the least, nor, of course, creating or destroying any faculties whatever or transposing their influence. No sociological view can therefore be admitted, at any stage of the science or under any appearance of historical induction, that is contradictory to the known laws of human nature." And yet he insists that historical inductions are essential conditions to the progress and perfection of the deductions which can be derived from biology and cerebral psychology. To the elucidation of the science as thus conceived, Comte devotes full one half of the bulky treatise which occupies five stout octavo volumes. It hardly need be said that his stand-point is that of materialistic atheism. His tone is, however, thoroughly grave and scientific, and, abating the many elaborately superfluous observations into which he is constantly betrayed, he shows careful and acute thinking upon many of the subjects which he passes in review, and leaves the reader with the feeling of profound respect for the earnestness of this plodding and laborious thinker—as also of regret for the narrow limits within which he confined himself by denying personality and freedom to both man and God.

John Stuart Mill devoted the last book of his treatise on Logic to the consideration of the logic of Sociology. He adopts in general the views of Comte, as modified by his acceptance of the relations involved in causation and consciousness. These modifications could not be very considerable, however, so long as he denied freedom and held to the necessity of human actions. Like Comte he distinctly recognizes the limitations and difficulties of the science, and treats of these difficulties at length in the

light of his own analysis of the Logic of Induction. He insists very justly that tho the science of man cannot enable us, like astronomy, to foresee and predict future sociological events with entire accuracy, it can yet with the greatest advantage acquaint us with the *tendencies* that enter into social phenomena, and so enable us in some measure to explain, to control and direct them.

Herbert Spencer, tho he is very largely indebted to Comte for many of his views, and especially in their application to Sociology, has emphasized his dissent from him by superadding the doctrine of organic development, or growth after the analogy of a living being. He has accordingly modified his views of Sociology by this addition. We propose to inquire with what success. Spencer's contributions to this science are professedly only Introductory to its study. They are to consist of "The Principles of Sociology," in two volumes, "Social Statics," and "The Study of Sociology," as also several volumes of "Descriptive Sociology," prepared under his direction, of materials for the comparative study of the customs and institutions of various tribes and nations of men at different periods of their history and at different stages of their progress.

The volume with which we shall chiefly concern ourselves is entitled "The Study of Sociology." In its external form and method it is obviously prepared for popular impression rather than for scientific conviction. The chapters are connected with one another by no very obvious relations of thought or association. The treatment of the topics in the several chapters is sensational rather than logical, and the offences against good taste and decency so far as either require a respect for convictions that are held sacred by the great mass of Mr. Spencer's fellow-countrymen are almost unparalleled in modern controversial literature. It is not easy to give any just conception of the treatise to one who has not read it, because its method is rambling and the clue of logical connection is very frequently lost in the bewildering maze of examples and stories which are designed to serve as illustrations. The only practicable method of discovering the author's theory is to subject the volume to a minute criticism. Even this promises only partial success.

One prominent feature characterizes this treatise from begin-

ning to end, and that is that the author assumes the truth of Evolution as an axiom which not only ought to be accepted by all men who can rightfully claim to be considered men of science; but has in fact been already received by all who are now known as such. He seems to assert with nearly the same outspoken positiveness that a theist in the common acceptation of the word cannot accept Sociology in any scientific sense of the term. We find the first of these positions distinctly announced in the first chapter, and the last stated in the concluding chapter. We ought to expect that each should be supported by some formal argumentation. Inasmuch as the book professes to be in some sense introductory to the study of this new science which the author finds not yet perfected or even formulated, and is addressed to the popular ear all unaccustomed to the science and ignorant of its meaning and its value, we should expect that a treatise with such a beginning and ending would be fortified by arguments and explanations touching these fundamental points. We have some reason for surprise if not for complaint when we find that its argumentation is occupied with the confirmation of the truth of Evolution through its application to Sociology rather than with the illustration of Sociology by means of Evolution.

In the first chapter we find the following :

"Now that the transformation and equivalence of forces is seen by men of science to hold not only throughout all inorganic actions, but throughout all organic actions; now that even mental changes are recognized as the correlatives of cerebral changes, which also conform to this principle; and now, that there must be admitted the corollary, that all actions going on in a society are measured by certain antecedent energies, which disappear in effecting them, while they themselves become actual or potential energies from which subsequent actions arise; it is strange that there should not have arisen the consciousness that these highest phenomena are to be studied as lower phenomena have been studied—not, of course, after the same physical methods, but in conformity with the same principles. And yet scientific men rarely display such a consciousness."

In the conclusion we find these utterances :

"Such must be, in part, my defence for having set down many thoughts which the title of this work does not cover. Especially have I found myself obliged thus to transgress, by representing the study of Sociology as

the study of Evolution in its most complex form. It is clear that to one who considers the facts societies exhibit as having had their origin in supernatural interpositions, or in the wills of individual ruling men, the study of these facts will have an aspect wholly unlike that which it has to one who contemplates them as generated by processes of growth and development continuing through centuries. Ignoring, as the first view tacitly does, that conformity to law, in the scientific sense of the word, which the second view tacitly asserts, there can be but little community between the methods of inquiry proper to them respectively. Continuous causation, which in the one case there is little or no tendency to trace, becomes, in the other case, the chief object of attention; whence it follows that there must be formed wholly different ideas of the appropriate modes of investigation. A foregone conclusion respecting the nature of social phenomena is thus inevitably implied in any suggestions for the study of them."

The first of these extracts is under the title of "Our Need of Sociology," and was designed to illustrate the point that men of science who know that Evolution is universally accepted as the only scientific theory of all phenomena, the spiritual and social included, have not yet accepted the necessary conclusion that Sociology can only be explained by this theory, and therefore need to be instructed in respect to these special applications. The considerations adduced in the second of these extracts would have led a moderately candid man to ask whether it were impossible to believe that human freedom and a superintending Providence are consistent with the presence and agency of fixed forces or tendencies that conform to natural law. A person moderately acquainted with the course of human speculation respecting social phenomena from the Book of Job onwards, would at least recognize the unquestioned fact that both men and devils—if we are to credit Milton—had in every generation vexed themselves with inquiries how God could execute his decrees in the developments of human history and yet man be free to promote or thwart them. That a theist or Christian had ever attempted to form a theory of Sociology, and with some fair pretensions to reasonableness, seems never to have entered into the conception of this student of man, to whom the very term Rational or Scientific Theology is an offence to his understanding and the object of his ignorant and sometimes ill-mannered ridicule.

The evils adduced in the first chapter to prove the need of social science are pertinent enough provided it were conceded that Sociology is adequate to prevent or cure them. Mr. Spencer uses very just and true language concerning the necessity that character or the springs of action should be changed in order that conduct may be rectified. He almost agrees with those teachers whom he sneers at as Methodists in respect to the necessity of a new birth in man in order that society may be reformed. But unfortunately he holds with Robert Owen that any inward change of character can be effected only by favorable social circumstances. In this particular many thinkers who have meditated as profoundly as he upon the problems of Sociology do not agree with him, but agree with the Methodists.

The second chapter asks and seeks to answer the question "Is there a Social Science?" In discussing this question Mr. Spencer supposes that there are two classes of persons who must answer the question in the negative. The first believe "that phenomena that are greatly involved are supernaturally produced," conspicuous by the agency of great men, and the second contend that Sociology cannot meet the requisitions for a science by reason of the element of human freedom. In illustrating the first he holds up to ridicule the devout recognition of the agency of God on various occasions of history, and in treating of the second he attacks Mr. Froude and Mr. C. Kingsley for seeming to deny that a social science of free beings is possible. He forgets that what they intend is that Sociology cannot be an exact science —that inasmuch, in the language of Mr. Mill, it has to do with tendencies only, its provisions and explanations can never reach beyond a certain degree of probability and must always be uttered with more or less reservation. Indeed Mr. Spencer without knowing it seems to furnish all the materials for this very answer to Mr. Froude and Kingsley in the concessions which he subsequently makes concerning the failures to gain certainty and completeness in our provisions and explanations of social phenomena, and without seeming to be aware that the argument is as truly at their service as it is at his own. The chapter abounds in sundry particularly splenetic passages, as when Mr. Spencer harps upon a theme which the reader of his graver

works will recognize as having been treated before under the title of "The Impiety of the Pious."

"The disguises which piety puts on are, indeed, not unfrequently suggestive of that which some would describe by a quite opposite name. To study the Universe as it is manifested to us; to ascertain by patient observation the order of the manifestations; to discover that the manifestations are connected with one another after a regular way in Time and Space; and, after repeated failures, to give up as futile the attempt to understand the Power manifested is condemned as irreligious. And meanwhile the character of religious is claimed by those who figure to themselves a Creator moved by motives like their own; who conceive themselves as discovering his designs; and who even speak of him as tho he laid plans to outwit the devil!"

He seems also to wander a little from the question whether there is a social science in the following:

"Just as that theory of the solar system which supposes the planets to have been launched into their orbits by the hand of the Almighty looks feasible so long as you do not insist on knowing exactly what is meant by the hand of the Almighty; and just as the special creation of plants and animals seems a tenable hypothesis until you try and picture to yourself definitely the process by which one of them is brought into existence; so the genesis of societies by the actions of great men, may be comfortably believed so long as, resting in general notions, you do not ask for particulars."

The third chapter, "On the Nature of the Social Science," ought to be the most instructive of all, inasmuch as it should define and defend the conception of Sociology which after so much painstaking we might suppose had been reached by Mr. Spencer. We turn the leaves with awakened interest, expecting on every page to find a statement of the improvements which he has made upon Comte and Mill, and especially of the illuminating light which has been poured upon it by the *prima philosophia* of Evolution. We come to the last paragraph and the last line—and what have we found? Not a single either concise or expanded definition of the new social science—not even a sketch of the materials from which to frame a definition by either condensation or inference. All the chapter yields to us is a series of rambling remarks upon society as an organism—the import or intent of which is to illustrate the analogy be-

tween growth in the several forms of living beings and growth in what we popularly call social organisms. Even these facts and observations are not so much designed to illustrate or prove that social phenomena are explained by the law of Evolution as to show that social phenomena follow the laws of organic growth and therefore prove the doctrine of Evolution. Despairing of finding in the introductory volume an answer to our question, *What is Sociology as conceived by Mr. Spencer*, we turn to the "Principles of Sociology," Vol. I., being attracted by the promising table of contents of Part II., "The Inductions of Sociology." But after looking through all the chapters, and following the many illustrations gathered on the one hand from the lowest forms of living beings and on the other from every description of social relations and progress, we are forced to conclude that the author is seeking to establish the universality of the doctrine of Evolution by an accumulation of particulars from the two domains of life and society. We have in this an example of what we find everywhere in all his treatises. Whatever the subject-matter may be, they are all written to illustrate and confirm the law of Evolution as everywhere present and controlling all phenomena.

Looking elsewhere for what we seek, we find the keynote of his system expressed by himself, in the words in which he explains the additions which he has made to what he learned from Comte: "And now let me point out that which really has exercised a profound influence on my course of thought. The truth which Harvey's embryological inquiries first dimly indicated, which was more clearly perceived by Wolff and Goethe, and which was put into a definite shape by Von Baer—the truth that all organic development is a change from a state of homogeneity to a state of heterogeneity—this it is from which very many of the conclusions which I now hold have indirectly resulted. There is also manifested the belief that this evolution is in both cases determined by the coincidence of conditions—the action of circumstances. And there is further in the sections above referred to a recognition of the fact that organic and social evolutions conform to the same law."

This application of Evolution seems to have wrought like new wine upon a head previously wonted to the weak and

watery mechanical philosophy of Comte. The product has been a degradation of the conceptions proper to the organic and the spiritual to a hybrid materialism, and the explanation of all the forms of human thought and feeling, as also of the phenomena of man whether individual or social, by the attraction and repulsion of original molecules or star-dust. We know indeed that the state was conceived by Plato to be that spiritually organized unity which the potently working idea wrought out of crude matter after manifold struggling essays towards its own realization. In Aristotle we have a similar conception stated in more accurate and scientific language. But according to Herbert Spencer social organization is effected by the spontaneous elevation of material elements and the adjustment of the relations of matter into structures that are spontaneously and successively spiritualized and made capable of the highest and noblest functions and relations.

This Chapter III. which proposes to define the nature of Sociology begins with what seem to be exact definitions and proceeds with plausible analogies. The critic who follows it with a careful scrutiny is soon confounded by the dexterity with which the author plays fast and loose with his fundamental notions and the ease with which he glides from one to another, borne up and onward by the flimsiest and most transparent of metaphors. For example, he starts with the true position that the shape of the ultimate molecules in any mechanical combination determines the external form of the mass into which they are gathered. He observes next that in chemical and many other if not in all purely physical adjustments, each combination has a form of crystallization which is taken to determine its chemical or physical qualities. Here we have function dependent on structure. He proceeds to observe that in living matter the same is true, for do we not see that the polyp and the begonia when divided grow again after the same form as the undivided parent? "Given then the nature of the units, and the nature of the aggregate they form is predetermined." That may be, but it does not follow that function, as well as shape, depends on structure. It is not on the chemical units as units that enter into water that its properties depend, but on their capacity to affect one another when brought into contact. It

is not the relative position of the particles that enter into an iron bar that makes it weak or strong, but on their mutual action on one another in molecular relations. Let it be granted that the form of a pile of cannon-shot depends altogether on their relative position, it by no means follows what is true of a pile of cannon-shot explains all that is true of the human brain and the human body with the functions of life and thought and feeling. Mr. Spencer clears every one of these chasms with flying leaps, and alighting upon that structure which we call Society, he concludes that as in all lower forms of being the properties or functions depend on the arrangement of the units, so is it with that social structure of which the units are living and thinking men and women. He does indeed condescend to say in passing: "Those who have been brought up in the belief that there is one law for the rest of the universe and another law for mankind will doubtless be astonished by the proposal to include aggregates of men in this generalization." They are astonished, and with reason.

We submit, moreover, that such reasoning strictly construed overthrows the doctrine of Evolution as a succession of processes of differentiation and integration. If "the properties of the units determine the whole they make up," then the aggregate equals the sum of the units and its functions are expressed by the sum of their united force. Now it is clear to us that the aggregates called the human heart and the human liver and the human brain as organs with functions are something more than the sum of the units that compose them, and it ought to be equally clear to Mr. Spencer that if the doctrine of Evolution is true any lower structure of aggregates has the power to transform itself, that is its own units, into structures which differ from itself in higher capacities and functions. That is, a unit with a given structure or mechanical disposition of molecules not only has the capacity for exercising the functions which this structure makes possible, but of evolving another molecular structure with other functions by the aid of a new environment.

Mr. Spencer barely saves himself from persisting in this oversight of his own essential principle of Evolution, by introducing, almost by accident, two qualifying clauses in which he repre-

sents social aggregates to be more than added units. "It" (social science) "has to explain how *slight modifications of individual nature* arising under modified conditions of life make somewhat larger aggregates possible;" and again, "It has to exhibit the stronger and more prolonged social influences which by *further modifying the characters of the units* facilitate aggregation with further complexity of social structure."

It must be obvious to any one familiar with this kind of reasoning that the words *structure, function, organs and organism, growth and development* are capable of a great variety of significations, and these may be easily interchanged with one another by a confident and careless thinker. A well-known President of the great republic once made himself notorious by calling himself "an old public functionary," and it is no secret that another was willing to be any "organ" of the people and boasted that he had been evolved through all the organs intermediate from an alderman up to a President by accident. In such connections these terms seem simple and unambiguous. But when we ask what there is in "the structure" of the commonwealth that produces the organ, or in the structure of "the organ" that enables it to successively fulfil all the varied functions from an alderman up to a President, the analogies begin to be uncertain. Moreover, when Comte contends that the highest conceivable perfection of the social structure and that to which it tends by the law of progress will be reached when "the individual life shall be subordinated in the greatest degree to the social life," and when Spencer contends that this perfection will be realized under the law of Evolution "when social life will have no other end than to maintain the completest sphere for individual life," we have reason to conclude that the so-called social organism of which the units are intelligent and free includes elements and relations that are very different from those concerned with the form of a pile of cannon-balls, or the shaping of a crystal, or even the determination of the functions of a living vegetable or animal. We repeat that we find no objection to the terms *organism, growth, structure, and development*. But we find in them, when used in a science of Sociology that concerns human beings, relations that are higher than any which mechanism implies. To our thinking

they suppose life and spirit, intelligence and personality, freedom and God in the universe. For these very reasons we cannot consent that they should be turned to baser uses by any kind of philosophical *legerdemain*, or be employed to dignify and recommend a materialistic view of the forces which control human society or an atheistic theory of human progress.

We have said enough of the vagueness of Spencer's conception of structure and organization and growth when used to explain the nature of social science. In the subsequent part of this chapter he proceeds to "make more definite the conception of a social science" by laying down a few propositions respecting the relations of structure to organization and growth. They are like the following: "Take the general fact that along with social aggregation there always goes some kind of organization." "A differentiation of the originally homogeneous mass of units into a co-ordinating part and a co-ordinated part is the indispensable initial step." "Along with evolution of societies in size there goes evolution of their co-ordinating centres, which having become permanent presently become more or less complex." "Men rise into the state of social aggregation on condition that they lapse into relations of inequality in respect of power and are made to co-operate as a whole only by the agency of a structure securing obedience." "At a higher stage the power of the chief being well established he no longer supports himself."

The relation between structure and growth is also illustrated in order to show that great growth is impossible without a complicated structure, and conversely that a complex structure tends to arrest growth, as is seen in appliances for locomotion, drainage, trade, and education, the organs of which, like those of an animal body, first facilitate and then hinder growth. These positions are doubtless designed to shed further light on the nature of Sociology as a science, but they all assume the position what has never yet been proved; viz., that these fundamental conceptions have the same import in the so-called mechanical, vital, and social organisms. Upon this much-questioned point the entire chapter throws not a ray of light, however, and we are consequently left as much in the dark at the end as we found ourselves at the beginning.

The scientific student who requires clear and justified con-

ceptions to begin with might be tempted to close the book in utter disgust and despair did he not find in Chapter XIV. some ground for hope that it would furnish the needed light as to what Sociology is. This chapter is entitled "Preparation in Biology," and purports to show how the scientific study of life is a preparation for the scientific study of society. Here perhaps the clue may be found which shall explain how the animal is related to the social organism. Early in this chapter the author rises to the doctrine of the development of organisms one from another, and asserts that this is essential to Sociology in its complete and highest achievement. He remarks of Comte:

"Nor did he arrive at that conception of the social science which alone fully affiliates it upon the simpler sciences—the conception of it as an account of the most complex forms of that continuous redistribution of matter and motion which is going on universally. Only when it is seen that the transformations passed through during the growth, maturity, and decay of a society conform to the same principles as do the transformations passed through by aggregates of all orders, inorganic and organic—only when it is seen that the process is in all cases similarly determined by forces, and is not scientifically interpreted until it is expressed in terms of those forces;—only then is there reached the conception of Sociology as a science, in the complete meaning of the word."

After this he proceeds to show the relation of the two sciences:

"There are two distinct and equally important ways in which these sciences are connected. In the first place, all social actions being determined by the actions of individuals, and all actions of individuals being vital actions that conform to the laws of life at large, a rational interpretation of social actions implies knowledge of the laws of life. In the second place, a society as a whole, considered apart from its living units, presents phenomena of growth, structure, and function, like those of growth, structure, and function in an individual body; and these last are needful keys to the first."

Taking the second of these positions first, on which the reader will observe the whole question turns, he seeks to show that society, apart from its being composed of living units, is analogous to a living organism and the resemblances are more than metaphorical. The parts are mutually dependent; they are diverse in structure, also in function, and each by its function supplies what the other lacks. These organs communicate with

one another, they combine with one another, they exchange with one another, they are dominated by a leading organ: all of which is true, but leaves the question still unanswered whether or not the higher organisms because of their points of similarity may be held to be evolved from one another, or whether the operations of the higher can be explained by the laws of the lower; i.e., whether life does not possess properties which inorganic relations can neither attain to nor account for, and whether social organisms in their turn are not the products of special social propensities and forces. These questions the author does not raise, and certainly does not answer them, but leaves us at the end as when he met us at the beginning with the assertion that the doctrine of development in the two alternate processes of differentiation and integration accounts for all kinds of institutions, as also for every order of existing beings and phenomena.

It is characteristic of the author that having finished what he has to say of biology as a preparation for Sociology, he rushes into a long haranguing discourse on the impolicy of State patronage, interference, and assistance, in respect to the public health, calamity, poverty, education, beyond the limits which biology would dictate when it has established its inductions. It is a small consolation to be told that in the mean time Sociology must wait, and for a long time, till biology has reached and vindicated its own inductions before Sociology can borrow and apply them.

Thus far we have followed Spencer's exposition of the science which, in a sense, he claims to have first adequately conceived. This exposition occupies only a small portion of the volume—at the most but two or three chapters. The remaining chapters are, however, even more significant. They consist of an exposition of the difficulties which stand in the way of its mastery by leaders in the field, and of its reception by their disciples. Mr. Spencer does not profess to have himself mastered these details. He has only discovered that such a science may be constructed. He has not entered the promised land. He has only seen it from Pisgah, and marked out its boundaries and assured his followers that it invites to conquest and possession. Meanwhile the difficulties that stand in the way are manifold

and almost insuperable. It would seem that centuries must elapse before they can be set aside and overcome. These difficulties are divided into three, roughly classed as objective and subjective *plus* several distinctive biases. The examples of these difficulties are of a very varied character, and are drawn from the author's abundant reading, and from events and statements of a very piquant and striking, not to say sensational and startling, character. Many of them are offensive to the taste. Not a few of them are indecent in their suggestions, and are positively flippant if not blasphemous in their treatment of sacred objects and the feelings of those to whom they are sacred. Many of them, on the other hand, are interesting and striking even when they do not seem to be pertinent or convincing. Very few of them, however, are fitted to strengthen respect for the sagacity of political leaders or reformers, of moralists or statesmen, or for the honesty or competency of Christian teachers, or for the intelligence or benevolence of Christian nations. The world, according to Mr. Spencer, is in a very bad way, literally perishing for the lack of Sociology, and the difficulties are manifold and insuperable in the way of its deliverance. In illustration of a single so-called objective arising from a subjective difficulty in the way of gaining a misjudgment of a fact, the author devotes seven pages (84-90) to the exhibition of the evidence that an entirely "false state of facts" had been accepted by the English public concerning the very rapid spread of the venereal disease as a motive to active public interference by statute for its repression. In illustration of the tendency to mingle inferences very largely with observation, he notices the unfounded conclusions which had been derived from statistics concerning the relative mortality of married and single persons. The objective difficulties in which no subjective modifications are blended are the vast spaces from which the facts must be gathered and generalized, the enormous length of time along which their succession is to be traced, both of which are forcibly illustrated. From the author's discussion of many of these topics valuable results may be derived.

The subjective difficulties proper begin in the sixth chapter with those which are "Intellectual." The author begins with a lively story of a mother who impatiently scolds her child in a rail-

way car because it displays a restless curiosity which the mother has outgrown, and cites this to illustrate the automorphic tendency to judge the operations of others' minds by our own. This is a very formidable obstacle in the way of our judging of the condition of the communities unlike ourselves in which we propose to effect changes by sociological appliances. The error here is twofold—the belief, on the one hand, that man is the same in all times, and the belief, on the other, that human nature may be readily altered. The double belief which at once reconciles and corrects the two extremes, and which is essential to a sound Sociology, is "the belief that human nature is indefinitely modifiable, but that no modification of it can be brought about rapidly." No sound social or political philosopher can object to this principle within certain limits. But as held by Mr. Spencer as the logical outcome of the doctrine of Evolution, it means that everything which we call human nature in its holiest and most refined judgments and feelings is the product of circumstances. Consequently the sacred and the profane, the decent and the gross, the decorous and the lewd, are the creatures of environment and association. Several of the stories told in this chapter to illustrate the want of plasticity in the conceptions of men are sufficiently indecent to exemplify the superior plasticity of Mr. Spencer's own conceptions of what is decorous in a writer for the present decade. We quote one of the least objectionable:

"That monogamy is not the only kind of marriage, we are early taught by our Bible-lessons. But though the conception of polygamy is thus made somewhat familiar, it does not occur to us that polyandry is also a possible arrangement; and we are surprised on first learning that it exists, and was once extremely general. When we contemplate these marital institutions unlike our own, we cannot at first imagine that they are practised with a sense of propriety like that with which we practise ours. Yet Livingstone narrates that in a tribe bordering one of the Central African lakes, the women were quite disgusted on hearing that in England a man has only one wife. This is a feeling by no means peculiar to them."

In order still further to exemplify the want of plasticity which enables us "to see ourselves as others see us," he gives six pages (139-144) to an observer in the far future of the Eng-

lish people of to-day as they might be interpreted by records and fossil and other remains. Of this we quote the following:

"This mention of their missionary enterprises introduces other remarkable anomalies. Being anxious to get adherents to this creed which they adopted in name but not in fact, they sent out men to various parts of the world to propagate it—one part, among others, being that subjugated territory above named. There the English missionaries taught the gentle precepts of their faith; and there the officers employed by their government exemplified these precepts: one of the exemplifications being that, to put down a riotous sect, they took fifty out of sixty-six who had surrendered, and, without any trial, blew them from the guns, as they called it—tied them to the mouths of cannon and shattered their bodies to pieces. And then, curiously enough, having thus taught and thus exemplified their religion, they expressed great surprise at the fact that the only converts their missionaries could obtain among these people were hypocrites and men of character so bad that no one would employ them."

Of the bearing of seven eightths of this chapter on Sociology a would be difficult to find any evidence.

Passing over the seventh chapter, we come to the eighth, on the "Educational Bias," which exhibits the theory of ethics as held by the author to be at once as shallow and as false as could easily be conceived, and by consequence to imply a theory of social progress which is equally defective. It opens with the following:

"It would clear up our ideas about many things, if we distinctly recognized the truth that we have two religions. Primitive humanity has but one. The humanity of the remote future will have but one. The two are opposed; and we who live midway in the course of civilization have to believe in both. These two religions are adapted to two conflicting sets of social requirements."

"On the one hand, there must be social self-preservation in face of external enemies. On the other hand, there must be co-operation among fellow-citizens, which can exist only in proportion as fair dealing of man with man creates mutual trust. . . . In adjustment of these two conflicting requirements, there grow up two conflicting codes of duty, which severally acquire supernatural sanctions. And thus we get the two co-existing religions—the religion of enmity and the religion of amity."

"The religion of enmity nearly all men actually believe. The religion of amity most of them merely believe they believe."

"From the books of the Jewish New Testament we take our religion of amity. Greek and Latin epics and histories serve as gospels for our reli-

gion of enmity. . . . The nobility of self-sacrifice, set forth in Scripture-lessons and dwelt on in sermons, is made conspicuous every seventh day; while during the other six days the nobility of sacrificing others is exhibited in glowing words."

The alleged incompatibility between the two creeds is illustrated by an incompatibility alleged to be equally extreme confessed between the Christian faith and the scientific physics of Faraday:

"A late distinguished physicist, whose science and religion seemed to his friends irreconcilable, retained both for the reason that he deliberately refused to compare the propositions of the one with those of the other. To speak in metaphor—when he entered his oratory he shut the door of his laboratory; and when he entered his laboratory he shut the door of his oratory. It is because they habitually do something similar, that men live so contentedly under this logically indefensible compromise between their two creeds."

"The religion of amity and the religion of enmity, with the emotions they respectively enlist, are important factors in sociological conclusions; and rational sociological conclusions can be produced only when both sets of factors come into play. We have to look at each cluster of social facts as a phase in a continuous metamorphosis. We have to look at the conflicting religious beliefs and feelings included in this cluster of facts as elements in this phase. We have to do more. We have to consider as transitional, also, the conflicting religious beliefs and feelings in which we are in brought up, and which distort our views not only of passing phenomena our own society, but also of phenomena in other societies and in other times; and the aberrations they cause in our inferences have to be sought for and rectified. Of these two religions taught us, we must constantly remember that during civilization the religion of enmity is slowly losing strength, while the religion of amity is slowly gaining strength. We must bear in mind that at each stage a certain ratio between them has to be maintained. We must infer that the existing ratio is only a temporary one; and that the resulting bias to this or that conviction respecting social affairs is temporary."

The author's theory of ethics is this: Every act and feeling which terminates in ourselves is essentially incompatible with every act and feeling that benefits another. In other words, a man cannot in any sense love himself or care for himself without hating his neighbor. Moreover, every act of injury to another, whatever be the occasion or the motive, is of necessity dictated by the spirit of enmity. To act for the welfare of our-

selves is incompatible with the exercise of a feeling or activity which may benefit others. Every act of self-concern or self-defence or aggression in any form of war is dictated by hatred to others. The two tendencies are, however, necessary in man's at present imperfect state. They must continue in inevitable antagonism until society is so modified that the interests of others shall necessarily coincide with our own. When the social forces are readjusted, every man shall promote his own welfare through every act that promotes that of others; then society shall attain the perfection to which Sociology tends to conduct it. The theory of ethics outlined in this volume is more fully expanded in the "Data of Ethics."

His interpretation of the religion of enmity as taught and accepted by Christendom is singularly paradoxical. That men ought to hate their enemies, or that it is in itself noble to sacrifice them, no man teaches and no man believes. What is extolled in war are skill and courage and self-sacrifice, and chiefly because of their heroic, unselfish aspects, but never the spirit of hate and murder. It may be that men from selfish impulses often devise pretexts for needless and cruel wars. But the pretexts and excuses which they plead are uniformly in reasons of benevolence and virtue and justice. To reason because men *act* against their convictions and their religions, and in so doing seek for flimsy pretexts to excuse or defend these acts, that therefore they must believe their actions right, or because under the present imperfect state of society men must necessarily practise "the religion of enmity," that therefore their actions are not wrong, is to fall into fallacies that have been refuted often enough not to need to be refuted again. All these fallacies are accepted and reiterated by the author.

The religion or ethics of unqualified altruism is assumed to be the Christian law, and this is conceived to be as extreme and one-sided as the religion of unqualified egoism. "Against the doctrine of entire selfishness it sets the doctrine of entire self-sacrifice." "In place of the aboriginal creed not requiring you to love your fellow-man at all . . . there came a creed directing . . . that you shall love him as yourself. Nineteen centuries have since wrought some compromise between these opposite creeds. It has never been rational, however, but only empirical—mainly, indeed, unconscious compromise. There is

not yet a distinct recognition of what truth each extreme stands for, and a perception that the two truths must be co-ordinated." If Mr. Spencer's theory is to be taken as the last and best interpretation of the Christian ethics, we certainly give our assent to this statement. There are not a few well-taught Sunday-school children, however, who have a more enlightened theory of the Christian law of duty than Spencer finds in the New Testament.

The remainder and much the larger portion of this chapter on the "Educational Bias" is devoted to the illustration of the overweening influence of the military spirit and the excessive homage which is paid to the military virtues and to military heroes, ostensibly for the purpose of exemplifying the operation of the religion of enmity. Both lines of argument are made to converge in the dreary conclusion that till society is perfected we must do the best we can and let the pendulum vibrate hither and there between the religions of amity and enmity, till the equilibrium shall be attained in that perfectly balanced society which Sociology contemplates as its ideal—but so far as we can see helps us very little towards making a reality.

The "Bias of Patriotism" is discussed in the ninth chapter, in which the author gives us much lively and piquant writing in illustration of the over-estimate of their country and its doings by the French and Germans respectively. This is followed by a very long series of comments on anti-patriotism as exemplified by Mr. Matthew Arnold in his over-appreciation of the French as contrasted with the English in many lines of science and culture. The bearing of this very lively chapter upon Sociology is very remote.

The "Class Bias" and the "Political Bias" fill the two chapters following, in which there is nothing special to notice save the remoteness of the positions taken and the facts adduced from any very significant or direct application to Sociology.

The twelfth chapter, which follows, on the "Theological Bias," has attracted special public attention rather on account of its offensive and contemptuous illustrations than because of any novelty in the opinions expressed. Similar opinions are freely asserted in Spencer's other works. His rejection of any possible divine communication of truth to man, or the manifestation of any divine or supernatural personality, is distinctly

avowed in his graver treatises. His position that Agnosticism is the only creed that an enlightened philosopher can hold in respect to the Infinite and Self-existent, which he acknowledges we must believe, and the kindred doctrine that every form of theological truth must necessarily be temporary in its duration, and every form of positive faith must give way before progressive scientific illumination, has been distinctly avowed and carefully defended elsewhere. The reassertion of these doctrines in this volume was to be expected, and ought not to bring any special reprobation. That which distinguishes this volume is the open expression of sarcastic contempt by illustrations and comparisons which remind us forcibly of Voltaire and Paine, for both of whom manifold excuses might be found which Spencer cannot plead. The fact that these examples are but few does not furnish any sufficient defence of those which do occur. We cite one or two of the least offensive. After copying from a traveller a horrid recital of the cannibalism of the Fijians in imitation and honor of their gods, Mr. Spencer proceeds to say :

“ Such being the account of the Samoans, and such the account of the Fijians, let us ask what the Fijians think of the Samoans. ‘ The Fijians looked upon the Samoans with horror, because they had no religion, no belief in any such deities [as the Fijian], nor any of the sanguinary rites which prevailed in other islands;’—a statement quite in harmony with that made by Jackson, who, having behaved disrespectfully to one of their gods, was angrily called by them ‘ the white infidel.’ ”

“ Any one may read while running the lesson conveyed ; and, without stopping to consider much, may see its application to the beliefs and sentiments of civilized races. The ferocious Fijian doubtless thinks that to devour a human victim in the name of one of his cannibal gods is a meritorious act ; while he thinks that his Samoan neighbor, who makes no sacrifice to these cannibal gods, but is just and kind to his fellows, thereby shows that meanness goes along with his shocking irreligion. Construing the facts in this way, the Fijian can form no rational conception of Samoan society. With vices and virtues interchanged in conformity with his creed, the benefits of certain social arrangements, if he thinks about them at all, must seem evils and the evils benefits.

“ Speaking generally, then, each system of dogmatic theology, with the sentiments that gather round it, becomes an impediment in the way of social science. The sympathies drawn out towards one creed and the correlative antipathies aroused by other creeds distort the interpretations of all the associated facts.”

He argues further, what is true of a general is also true of a special theological bias :

"Everywhere, indeed, the special theological bias accompanying a special set of doctrines inevitably prejudgets many sociological questions. One who holds a creed as absolutely true, and who by implication holds the multitudinous other creeds to be absolutely false in so far as they differ from his own, cannot entertain the supposition that the value of a creed is relative. That a particular religious system is, in a general sense, a natural part of the particular society in which it is found, is an entirely alien conception, and indeed a repugnant one. His system of dogmatic theology he thinks good for all places and all times. . . . Thus prepossessed, he passes over the proofs found everywhere, that a people is no more capable of suddenly receiving a higher form of religion than it is capable of suddenly receiving a higher form of government; and that inevitably with such religion, as with such government, there will go on a degradation which presently reduces it to one differing but nominally from its predecessor. In other words his special theological bias blinds him to an important class of sociological truths."

Designing to be impartial, he turns to the antitheological bias, and after giving instances of antitheistic iconoclasm from heathendom and Christendom, he proceeds, with that charming candor which he occasionally affects, to show that inasmuch as motives addressed to the reason have comparatively little influence upon the conduct and characters of men in comparison with what addresses their feelings, therefore superstitious and positive religions will be an inevitable necessity for long æons before that millennium when sociological truth shall shine by its own light and warm from its own fires. He concludes by repeating what is very familiar to the reader of his other writings, his confession of faith. Of the object of religious faith he says :

"The process of Evolution, which has gradually modified and advanced men's conceptions of the Universe, will continue to modify and advance them during the future. The ideas of Cause and Origin, which have been slowly changing, will change still further. But no changes in them, even when pushed to the extreme, will expel them from consciousness; and hence there can never be an extinction of the correlative sentiments. No more in this than in other things, will Evolution alter its general direction: it will continue along the same lines as hitherto. And if we wish to see whither it tends, we have to observe how there has been thus far a decreasing concreteness of the consciousness to which the religious sentiment is related, to infer that hereafter this concreteness will further diminish;

leaving behind a substance of consciousness for which there is no adequate form, but which is none the less persistent and powerful."

Religion subjectively viewed, or the religious sentiment, is thus characterized:

"Without seeming so, the development of religious sentiment has been continuous from the beginning; and its nature when a germ was the same as is its nature when fully developed. The savage first shows it in the feeling excited by a display of power in another exceeding his own power—some skill, some sagacity, in his chief, leading to a result he does not understand—something which has the element of mystery and arouses his wonder. . . . The hypothesis of atoms and molecules enables them to work out multitudinous interpretations that are verified by experiment; but the ultimate unit of matter admits of no consistent conception. Instead of the particular mysteries presented by those actions of matter they have explained, there rises into prominence the mystery which matter universally presents, and which proves to be absolute. So that, beginning with the germinal idea of mystery which the savage gets from a display of power in another transcending his own, and the germinal sentiment of awe accompanying it, the progress is towards an ultimate recognition of a mystery behind every act and appearance, and a transfer of the awe from something special and occasional to something universal and unceasing."

From atheism, or the religion of humanity, he expresses his dissent as follows:

"No one need expect, then, that the religious consciousness will die away or will change the lines of its evolution. . . . That the object-matter can be replaced by another object-matter, as supposed by those who think the 'Religion of Humanity' will be the religion of the future, is a belief countenanced neither by induction nor by deduction. However dominant may become the moral sentiment enlisted on behalf of Humanity, it can never exclude the sentiment, alone properly called religious, awakened by that which is behind Humanity, and behind all otherthings."

The summary of the Spencerian or Agnostic creed is forcibly stated in the following lines by another writer:

"At the end of every road there stands a wall,
Not built by hands—impenetrable, bare.
Behind it lies an unknown land. And all
The paths men plod tend to it, and end there.

' Each man, according to his humor, paints
On that bare wall strange landscapes: dark or bright,
Peopled with forms of fiends or forms of saints—
Hells of Despair or Edens of Delight.

“ Then to his fellows, ‘Tremble !’ or ‘Rejoice !’
The limner cries, ‘for lo, the Land beyond !’
And ever, acquiescent to his voice,
Faint echoes from that painted wall respond.

“ But, now and then, with sacrilegious hand,
Some one wipes off those painted landscapes all,
Muttering, ‘O fools, and slow to understand,
Behold your bourne—the impenetrable wall !’

“ Whereat an eager, angered crowd exclaims,
‘ Better than yon dead wall, tho pale and faint,
Our faded Edens ! Better fiends and flames
By Fancy painted in her coarsest paint

“ ‘ On the blind, bald, unquestionable face
Of that obstruction, than its cold, unclad
And callous emptiness, without a trace
Of any prospect, either good or bad.’

“ And straightway the old work begins again
Of picture-painting. And men shout, and call
For response to their pleasure or their pain,
Getting back echoes from that painted wall.”

Of this chapter on the “Theological Bias” we have only to say, as of many passages scattered through the volume, that it is difficult to determine whether it gives more decided evidence of *ignorance, narrowness, conceit, or virulence*. The writer seems to be *ignorant*, but not excusably, of the fact that very many Christian theologians and writers have commented as severely as he has done upon the impotence of a right intellectual belief separated from a sympathizing and man-loving ethics, and that the New Testament itself overflows at every pore with this vitalizing truth. He is not excusably ignorant, however, for his contempt of Christian theology and ethics and the philosophy which both suppose, is too frequently and broadly expressed to be capable of being referred to any other category than what he styles “the religion of enmity” and scorn. That this contemptuous or affected ignorance is *narrow* is evident from the fact that in not a single passage of all his works is there any warm or appreciating sympathy with the progress of peculiarly Christian emotions or Christian virtue or Christian civilization ; still further from the fact that tho in some of his later works, and notably in the fifteenth chapter of this book, he has laid special stress on the emotions as the great force by which man is to be elevated, and has recognized religion in some form as a per-

petual necessity to man, he has never suffered to escape him a word of fervent admiration for the ideal of life which Christianity has held aloft before so many generations to elevate their aspirations and subdue their passions, nor for the Christ whose inspiring force, whether he be real or ideal, has been gratefully and admiringly acknowledged by all magnanimous souls who have studied the comparative history of the religions of mankind. That his narrowness springs from *conceit* is evident from the supercilious disdain with which he passes over all the cosmogonies of the men who like him have sought to construct a theory of the world's development, and treats with special slight all those Christian theists who have accounted for the order of the world's arrangement by the fiat of the Creating will and the evolution of the world's history from nature to man by the continuous unity of the Creator's plan and purpose. His conceit is abundantly manifest in his confident statements concerning the opinions of men of whom he has only second-hand knowledge, and the assurance with which he criticises opinions and systems which he very imperfectly appreciates.

Were this volume open to no special objection on intellectual grounds for its want of clearness and method, its intellectual temper, if we may use such a phrase, lays it open to the severest criticism. If Socrates was right in insisting that candor and docility and caution and self-distrust and patience and charity are the prime conditions for success in philosophy, especially for beginners, then a treatise which exemplifies so offensively the opposites of these virtues must be almost the worst possible introduction to a science which, in the judgment of its professed master-builders, is as yet in its rudimentary condition.

We cannot withhold the remark, in this connection, that great as are the evils to which the indiscriminating devotees of Spencer are exposed in the weakening of their traditional faith in Christian theism and Christian ethics, and much as these are to be deplored, these evils are in our view by no means so serious as the danger of surrendering their intellectual and moral being to sophistical and shallow methods of inquiry. A man may lose his faith for a while, or be tossed for a longer or shorter season upon a sea of doubt. His old belief he may recover again, and hold it the more strongly and value it the more highly for the labor which it has cost him to regain it and the renewed joy with

which he has recovered his prize. But if the man has yielded his intellect to false methods of inquiry and sold himself to sophistical ways of judgment and shallow and unworthy reasons for belief, he can rarely recover from the fatal lesion to his intellectual and moral nature. So far as we have observed, converts to the Spencerian philosophy are not recruited in the legitimate method of beginning with their author's theory of knowledge and a careful scrutiny of his "First Principles." Those who begin at this point rarely desire to go farther. They find so much to question and reject—the logic is so incoherent, the definitions are so oscillating, and the inductions so venturesome—that they neither desire nor dare to follow so untrustworthy a leader. The men whom he usually attracts are those who begin with a specialty, either in politics or physiology or history, who, being little versed in philosophy, are prepared in their days of ambitious and manifold reading to accept with an easy faith almost any splendid generalizations that will stimulate the imagination and satisfy rapid and daring hypotheses. Were every student of this new school compelled to begin with Spencer's "Principles of Psychology" and his "First Principles," and were both of these works provided with a thorough and exhaustive index that would compel the reader to compare every term and definition as used in every place, there would in our opinion be very little change in the study of this greatly dreaded philosophy in any of its applications. To study it after a proper method with a mind competently trained after the rigid and honest ways of definition and reasoning would inevitably be to reject it. If its Evolutionary and Agnostic assumptions were seen to be invalid, the special applications to Ethics and Sociology would lapse of necessity. We believe that most of the currency and plausibility which Spencer's materialistic Evolutionism and his antitheistic Agnosticism have gained with his confiding and admiring disciples has been reflected back from the imposing array of facts and instances that he has marshalled from his enormous reading and the brilliant hierarchies of his generalization. It is beyond all question that he has devised the most comprehensive and shortest way of answering many questions that has recently been invented, and therefore is admirably fitted to addle the weak and empty-headed and even to intoxicate heads that are strong and self-confident.

We are tempted to notice one or two remarks in the concluding chapter. In reviewing the biases and difficulties in the way of a completed and triumphant Sociology, the author is led to ask what is to be expected from this long discussion in the way of removing these difficulties. The answer which he gives reminds us of the comment of the Prince in "Rasselas," who, after hearing the disquisition of Imlac on poetry, exclaims, "Enough! thou has convinced me that no human being can ever be a poet." Similarly Mr. Spencer asks a series of questions beginning with the following: "What is to be hoped from such a presentation of difficulties and such a programme of preparatory studies?" "Who will think it needful to fit himself by inquiries so various and extensive?" He answers thus: "To these questions there can be but the obvious reply—a reply which the foregoing chapters themselves involve—that *very little is to be expected.*" And the reason given as the outcome of his discussions is that according to the law of Evolution the feelings and thoughts of every man, which include the desires and science of every man, being the product of his age, cannot rise very greatly above it. The practical conclusion is, Do not greatly disturb yourself about reform or human progress in yourself or others, neither about private morals nor public institutions. You cannot make over the world or yourself any faster than at a certain rate, and tho it is well to gain as much Sociology and apply as much Sociology as you can, yet the world will be sociologically reformed at a very slow rate. This small ending of this magnificent beginning, when briefly stated, is this: Take the world easily, gain what light you can, and apply what reforms you may.

"Thus, admitting that for the fanatic some wild anticipation is needful as a stimulus, and recognizing the usefulness of his delusion as adapted to his particular nature and his particular function, the man of higher type must be content with greatly moderated expectations, while he perseveres with undiminished efforts. He has to see how comparatively little can be done, and yet to find it worth while to do that little: so uniting philanthropic energy with philosophic calm."

We observe also that in this concluding chapter Mr. Spencer turns with a half-pathetic, half-contemptuous allusion to men with whom, like Mr. Gladstone, "the belief in divine interposition goes along with, and by no means excludes, the belief in a

natural production of effects on society by natural agencies set to work." Any compatibility of the two agencies is in Mr. Spencer's view wholly illogical, and he dismisses the suggestion with a contemptuous allusion to the resort to prayer in the case of the illness of the Prince of Wales, on occasion of whose recovery "providential aid and natural causation were unitedly recognized by a thanksgiving to God and a baronetcy to the doctor."

And so he ends this long discussion with the assumption with which he begins, that in social phenomena we can only recognize natural causation, because, forsooth, if Sociology is a science it cannot admit any other agencies. It was also assumed that within the domain of natural law no other theory than that of Evolution could for a moment be possibly admitted by any one who can claim to be scientific. These assumptions involve a theory of Sociology which to all intents and purposes is substantially atheistic. There are many who believe that bad as atheism may be in physics, it is immeasurably more to be dreaded in political and social science.

Moreover, as the result of this protracted discussion of the difficulties in the way of this science, Mr. Spencer has brought us to the conclusion that the progress must necessarily be very slow, the determination of the forces and laws being independently delayed by their complexity, and at the end we are left with little more than a general faith in the progressive evolution of sagacity in the student and of phenomena in society itself. From these facts and conclusions of the author the theist would be led to the following meditation, with which we conclude our criticism.

We wonder that the thought has never occurred to Mr. Spencer that possibly those relations in the universe which are supreme and controlling are those which in common speech men call personal and moral; that a Self-existent person and created persons, under moral law and acting for moral ends, are no inconceivable or self-contradictory conceptions; that a universe controlled by such relations is as dignified and as philosophical a universe as one that depends on moving star-dust for its beginning and its explanation, and which ends in a brilliant explosion as its finale; that a Personal being who creates and sustains and evolves a plan of progress and development for matter and spirit may possibly subordinate fixed causation to moral

purposes without necessarily setting aside scientific law. We might even venture to suggest that in a book which cannot have been entirely overlooked in Mr. Spencer's manifold reading, the doctrine of Evolution with such elements and such agencies is clearly taught and analogies from physiological processes are as freely applied to illustrate the progress of the Kingdom of Heaven and of God as they are by Mr. Spencer himself. We might suggest in conclusion that with such a philosophy—the philosophy of Christian theism—Sociology may possibly become a far simpler science than is possible on the theory that the known and the knower are mutually dependent for what they are to be and for what they are to know on the molecules from which they were evolved. The clue to a perfect society is not left wholly nor mainly to the slow deductions of human experience and the bitter lessons of human sorrow. It is provided for in the law of love, which, were it perfectly obeyed, would be quick to interpret and prompt to regard the teachings and apply the lessons which human experience would gather from social observation and experiment. The province of Sociology in the service of Christian faith would be comparatively simple, for in all its inductions it would be guided by faith in the guidance of an instructing Providence and the inspiration of the living God. The student of Sociology would never find himself half stranded between the two seas of "philanthropic energy" and "philosophic calm." He would not need to school himself to sneer at self-sacrificing love and self-denying labor and forgiving patience as weak sentimentalities which science must disown and despise, but would find in the very exercise and experience of the sentiments of love and patience and hope the assurance that they may be safely followed because they are certain to triumph. He would also find the amplest reason to believe that in the kingdom of God, which God is even now developing on the earth by natural forces under supernatural guidance, the perfect society will be at last real on the earth, and the science of Sociology will be illustrated in a living example when "the tabernacle of God shall be with men, and he will dwell with them, and they shall be his people, and God himself shall be with them and be their God."

NOAH PORTER.

THE ULTIMATE DESIGN OF MAN.

TO what end was man created—man endowed with faculties so marvellous, and yet ever discontented, ever racked by aspirations that remain ungratified?

The solution given by each one of us to this problem is, in our existence, a momentous event. It determines the direction which we assign to our activity, and decides thereby the result of our life, a result which is great, inevitably great, whether it be of glory or of shame.

At the close of one of his celebrated addresses, the most popular orator humanity has ever known exclaimed : “ Whosoever heareth these sayings of mine, and doeth them, I will liken him unto a wise man, which built his house upon a rock : and the rain descended, and the floods came, and the winds blew, and beat upon that house ; and it fell not : for it was founded upon a rock. But every one that heareth these sayings of mine, and doeth them not, shall be likened unto a foolish man, which built his house upon the sand ; and the rain descended, and the floods came, and the winds blew and beat upon that house ; and it fell”—and here, reproducing, so to speak, in the majesty of his words, the crash of the falling structure, he added, “ and great was the fall of it.”

The life of a man reaching its close is indeed a grand spectacle, whatever that close may be ; appallingly grand when that life has been a failure ; sacredly, gloriously grand when the dying man, raising toward heaven a serene countenance, can say : “ Father, I have accomplished the work Thou gavest me to do.”

May the thoughts here submitted contribute to make our lives *successful* lives, lives answering to the Divine ideal of the ultimate design of man !

I.

First of all, there arises a preliminary question: Has man an ultimate design?

If each product of man's activity has a definite and decided purpose, how can man, the living principle of all this intelligent activity, himself be a being destitute of a purpose?

Yet there are minds that ask this question and answer it in the negative. They claim that in the presence of the phenomena of nature and even the phenomenon of the appearance of man, we may very well seek for *causes*, but not for the *purpose*. Occurrences and things, they say, obey laws and forces, but tend to no *design*. Two facts drawn, the one from the physical world, the other from our moral nature, seem to me to shed a sufficient light upon this question.

It is a universally admitted fact that man appeared last among the beings that people the earth, and that since his appearance science discovers that of no new species of existences, whether vegetable or animal. So, then, on the one hand, man made his appearance as the pinnacle and the utmost bound of nature; on the other hand, the creative work ceased with the appearance of this being. May we not logically conclude from this, that man was really the *purpose* of terrestrial creation? And if he be the purpose of creation, can it be that he has himself an aimless existence? Or, if this proof be not absolutely conclusive, is it not at least an inductive argument of great significance?

To this physical fact there corresponds a moral phenomenon of startling solemnity. It was pointed out, at the end of the last century, by one of the most profound thinkers that have honored the human race—Kant, the philosopher of Koenigsberg. In completing a work which has made an ineffaceable mark in the field of human thought, he wrote, under the sway of the most noble emotion, the following lines: "Two things fill my soul with an admiration and a veneration, ever new and ever increasing: the starry heavens above me, and the moral law within me. I am not compelled to look for these two grand sights through the covering of a mysterious obscurity, nor to ascertain them vaguely at an infinite distance. I con-

template them immediately before me ; they are bound to the very consciousness of my being. The one, the visible heaven, begins at the very point of the universe where I am, and widens around me in circles of worlds, in systems of systems, up to the infinitude of spaces and of times in which these worlds are situated. The other, the moral law, equally starts from my invisible self ; it places me in the midst of the intellectual universe, that other infinitude with which my personality stands in a necessary relation. And while the first (the sight of the heavens) annihilates my personal importance, the second (the fact of the moral law) raises to the infinite the worth of my personality ; since that law manifests in me the existence of a life completely independent of my animal life and of the world of sense."

Man is among all beings here below, the only one intrusted with a moral law. He became, in virtue of this, the privileged depositary of a life superior to all the laws and all the forces of the physical existence. Natural beings, deprived of moral light, can only be *means* in relation to each other. By that interior legislation which man possesses, he acquires an absolute value ; he appears as a being that has its ultimate design in the very activity it unfolds. Moral action, precisely because it has no other end but itself, impresses upon the being that is its author the seal of an accomplished destination.

II.

Man has therefore a destination. Physical nature and our own moral nature proclaim it in concert. But—and here arises a second preliminary question—should this ultimate design be regarded as *collective*, as applying only to the species, or, also, as *individual* ? In other words, does the goal to be reached stand immediately before each one of us, in such a way that we can realize it individually and possess it as our own property ; or, is the end of human existence to be realized only in a distant future wherein the last comers of the race alone will be able to share ? Or, even, may it not consist in an indefinite progress in which each generation participates only in passing, and according to the measure of its period ? Let us again interrogate, respecting this question, the two masters

whom we have just been consulting, external nature and our own moral nature.

The former unfolds beneath our eyes, in the lower grades of the organized world, an unheard-of prodigality of individuals. Only a very small portion of these innumerable products accomplishes the cycle of existence ; the greater part is expended in the service and for the supply of the food of other species. But in proportion as we rise in the scale of animal life, this lavishness diminishes and makes room for frugality ; the products become less numerous and consequently acquire more worth. Finally, when we have reached the pinnacle, man, parsimony succeeds frugality ; even the case of twins is, on this superior level, a rare exception. It is as if, in her hieroglyphic language, Nature said to the father and mother : " The being I confide to you is so exceptionally precious that your entire solicitude and all your united strength are not more than sufficient to labor for its preservation and training in view of its sublime destination."

In a word, in the sphere of animal existence, it is the species that governs ; the individual has worth only as a passing representative and depositary of the species. But when we arrive at humanity, the relation is reversed. Here the essential is the individual ; the species is only his cradle, his starting-point, his support, his auxiliary.

This significant language of Nature is confirmed by that of our own moral instinct. Whence, for instance, comes the aversion with which the institution of *slavery* inspires us, if not from the innate sentiment that man is not made to be degraded to the rank of a means ? Whence comes again the horror produced within us by the act of *cannibalism* ? It is often explained by the crime of the murder which is inseparable from it. But is it supposable that a soldier on the battle-field would willingly bring himself, if the necessity of food should become pressing, to feed upon the body of his comrade who has fallen under the shot of an enemy's ball ? No, the reason is more profound. This shrinking proceeds from the fact that the human body possesses in our eyes too exalted a dignity to be debased, like animal flesh, to the character of an aliment.

Our moral nature agrees, therefore, with external nature in

rendering homage to the value of that human personality the incomparable dignity of which God has proclaimed, by placing upon its head the crown of freedom of the will and of moral responsibility. A free personality carries within itself its own proper ideal, and not merely that of the species ; so that if humanity entire possesses a collective destination, this destination can only be the result of the accomplishment of every particular destination, the sum of the radiance formed by the pencil of rays emanating from individual perfections.

As for the idea, so wide-spread at the present day, of *indefinite progress*, how can we help discerning the contradiction which is inherent in it ? " The notion of progress," has said M. de Hartmann, the most sceptical and the most popular philosopher of Germany, " contains necessarily that of an object." For if after having taken a thousand steps, I am no nearer the goal than before beginning to walk, because it ever remains infinitely removed from me, such progress is in reality no progress at all. The notion of progress disappears with that of an end to be attained.

III.

We are, therefore, led to give greater precision to our original question.

What is the ultimate destination of the *individual* man ?

And since, inasmuch as man thinks, he has offered many answers to this problem, let us, first of all, establish the characteristics by means of which we shall be able to recognize the true solution.

These characteristics, indicated by the nature of things, are three in number :

1. The true solution must be applicable to all men. There can here be no possible aristocracy. Every one born of mankind must be able to realize the destination of man. Otherwise the unity of the human species would be destroyed.

2. The true solution must comprise, in each man, *the entire man*, with all his faculties. Otherwise, the faculty that is excluded would protest against the proposed destination, and the unity of the human person would be broken.

3. The true solution must be applicable to *all the moments of human existence*. Otherwise life would be composed of moments which concur in tending to our destination, and others which necessarily take us farther from it. The unity of human existence would be denied.

To comprise all men, the entire man, and that in all the moments of his life, here are the conditions to which the true solution of the problem of human destination must conform.

Starting from this point, let us put to the test the principal solutions of this great problem that have been offered.

I. Some—and those who practise this solution are more numerous than those who profess it—esteem the end of human life to be *pleasure*; not material gratification merely, but enjoyment in general, comprehending all the progress of civilization, the delights of intellectual enjoyments and of the fine arts, the sweet affections of the family. And as the condition of enjoyment in these different relations is assuredly wealth, this principle practically transforms itself, whether the truth be confessed or not, into the following: to make one's fortune, and to make it as quickly as possible, in order to be able to have the longest gratification.

Certainly, we cannot ignore the important part played by pleasure in the economy of human life. It powerfully stimulates the exercise of our faculties; it often serves to point out to us the normal character of our physical and moral states, just as suffering is an index of its diseased or abnormal character. But from the fact that pleasure may be useful to us as a spur or as a touchstone, it does not follow that it is the end of our existence. And, indeed,

I. It is not within the reach of *all*. How many lives are there which are fatally deprived of it, and which are even given up to its opposite! That little child, born with a vitiated blood and a misshapen body, for which every vital action is suffering, every motion torture; that poor orphan, upon whom life weighs like a daily load, who cannot meet an infant in the arms of its mother without feeling her heart breaking under the blow of poignant grief; that man who walks here below under the burden of a loss that has made him forever solitary, and has paralyzed within him even the faculty of enjoyment; that

other man who drags about with him the memory of a dishonorable deed which public opinion will never forgive him—Go, comfort these unfortunates, by preaching to them the doctrine of pleasure ! Say to them that the object of life is enjoyment—to them who are forever banished from this Eden ! It is hard under any circumstances to suffer. But to suffer while saying to one's self that this suffering leads to nothing, that far from bringing us nearer our destination, it takes us farther away from it—there is in this enough to cause the bitter cup to overflow ! It is despair with its most baleful consequences.

2. Does this destination embrace the *entire man* ? No ! There is even with us a faculty whose seat is precisely in the most noble regions of our soul, which frequently demands the voluntary renunciation of enjoyment and the free acceptance of suffering. It is the sentiment of moral obligation, of duty. A physician, the father of a family, who every hour exposes his life in the midst of the ravages of a contagious disease, does not act thus in view of enjoyment. And who, nevertheless, shall be able to say, should he perish at his task, that he has not accomplished his destination even better than in long enjoying the delights of life in the midst of his friends, at the price of a cowardly abandonment of his patients ? And will you accuse the man who sacrifices his life to save that of his benefactor of running counter to the grand design of man, because he subordinates the instinct of gratification to the noble impulse of gratitude ? The power of overcoming the allurements of pleasure or the fear of pain in the name of duty, is precisely what most deeply distinguishes man from animals. To seek to subject man to what is agreeable, is to efface this line of demarcation traced by nature herself ; it is to make us descend the ladder which we were called to climb.

3. Finally, pleasure is not the element that can be made to penetrate *all the moments* of life. I appeal here to a single man, to the most serious of all, to the oldest. If gratification were the object of human life, this design ought to burst forth in all its brilliancy at the moment when we approach the bounds, where the goal must be nearest to us. But what a strange end, I pray you to notice, for a being whose destination is pleasure, is that supreme anguish, that agonizing shud-

der, that presentiment of approaching dissolution, that nameless exhaustion which precedes what we call the last gasp ! This is the fatal rock upon which the theory of pleasure definitely splits.

To sum up this theory severs the unity of the species by assigning to human life an end which an entire portion of the race is fatally precluded from attaining. It severs the unity of the human person by proposing to man a destination which leaves outside of itself a certain number of its faculties, and those just the most noble. It severs the unity of each human life by dividing up life into series of moments, one series of which carry us toward the goal, while the other series take us farther from it.

This theory is, therefore, condemned by all our three postulates.

II. We shall be more brief in the discussion of another end which has often been assigned for human existence—namely, *Knowledge*.

This was the explanation of life offered by the best minds of antiquity, such as Plato and Aristotle.

That man is made to know, who doubts ? The eye is not more evidently constructed to see than the intellect to learn. But from the fact that knowledge is one of the elements that enter into man's destination, does it follow that knowledge is itself this destination ?

No ! For, in the first place, science is not for *all*, first because scientific men necessarily form a minority that can live only on the condition that, to enable them to live, thousands of others should consecrate themselves to the inferior occupations of life. The learned repay them, doubtless, for this service ; but such, at any rate, is the state of the case. Moreover, scientific aptitude is a prerogative that is conferred by nature only upon a somewhat restricted number of favorites.

In the second place, science is too narrow a function to embrace *the entire man*. That learned mathematician who, on coming from the representation of a dramatic masterpiece, exclaimed, "What does it prove?" was not certainly in our eyes a complete man. That professor of physics whom I heard one day on the top of Mont Pilatus, while gazing upon a glo-

rious sunrise, learnedly discuss the angle of refraction which the rays of the sun must make with the snowy surface, in order to paint it with that rosy hue, inexpressibly fresh and delicate, could he be regarded as a complete man? That father always shut up in his study, who is nothing for his family, and whose children disconsolately exclaim, "Our father is not a man, he is a *savant*!" could he be regarded as the type of a well-rounded man? Would one choose him for a confidant, for an intimate friend? The truth is that the intellect is not the whole man. The truth is that it is bitter cold on the lofty peaks of pure thought and of knowledge; that the heart grows hard and the vital blood may congeal up there under the icy blast of selfishness and pride. The truth is that beside intellect there exist within us will and feeling, of which the cultivation cannot be neglected without warping our development and mutilating our personality.

This end, knowledge or science, might, strictly speaking, answer to our third postulate. Study is adapted to fill *all the moments* of him who consecrates himself to it. Eating and drinking, rest and sleep, recreation and walking, can indirectly be put to the service of this work, until that hour, at least, when the intellectual faculties become impotent through disease or decline. But this fact, which I am glad to note, only proves one thing; and that is, that in passing from enjoyment to science we have begun to climb the ladder. We have really come a step nearer the solution sought for. But we have not yet reached it, as is attested by the demands of our first two postulates.

III. A third solution of the problem which occupies our attention has been proposed. The destination of man, we are told, is the fulfilment of moral obligation, of *duty*. "Duty," says a celebrated modern writer,¹ "with its incalculable philosophical consequences, in imposing itself upon all, resolves all doubts, reconciles all oppositions, and serves as a foundation to rebuild what reason destroys or allows to crumble away. Thanks to this revelation, free from ambiguity and obscurity, we affirm that he who has chosen the right is the truly wise man." In

¹ M. Renan, in his preface of the *Book of Job*.

other words, the normal man, the complete man is the man of duty.

We are quite ready to affirm with M. Renan the sovereignty of duty. But we ask ourselves merely what, in this point of view, is contained in the moral obligation thus placed upon the throne? We shall probably be told in reply: Why, it is justice toward our neighbor, kindness for all beings, self-control in the form of moderation in pleasure, and resignation in suffering.

Here is certainly a scheme of life which, when seriously undertaken, is not to be despised. It answers at least, in a certain measure, two of our three postulates, the first and the third. The principle of moral obligation does, indeed, apply to all human beings. "The divine revelation of duty," as M. Renan says, "illuminates every human conscience." The idiot himself is not destitute of all moral sense. I have seen the poor *crétin* of our high valleys, at twenty years of age, clinging to his mother's dress and practising, as well as he could, the duty of loving her, obeying her, and relieving her in her domestic toils.

The principle of duty is equally capable of presiding at every instant of our existence, and thus of securing the continuity of moral life. What act is there of ours, be it even the simplest recreation, which cannot, by the spirit we bring to it, come directly or indirectly into the category of duty accomplished?

Two of our postulates are, therefore, really satisfied, and we have certainly taken a step forward. Knowledge was nearer the goal than pleasure, duty is nearer to it than knowledge. May we then have reached the end? Let us consult again our last postulate. Does this solution, duty, satisfy *the entire man*?

The human soul is endowed with three principal faculties: the faculty of thought, that of will, and that of feeling. By the first, the intellect, we perceive the whole cycle of existence; by the second, the will, we set upon the world about us our own impress. The third is the deepest and most mysterious of the three. It is to them what the trunk of a tree is to the two mighty branches which it sustains and nourishes. Feeling is the seat of impressions, whether pleasurable or painful, of sympathies and antipathies, of high aspirations, and of unfathomable presentiments. It is by this faculty that we feel as it were the

rebound of all that takes place in the entire universe, and hold intercourse with the infinite, a rich mine whence proceed the noblest metals current in human life, great thoughts and heroic resolutions.

Are these three faculties satisfied by the theory of duty?

Let us begin with the *will*. It is the faculty to which the very notion of duty appeals most directly and to which it most distinctly pays homage. The will, confronted with duty, complains that it has, in order to sustain it against the allurements of pleasure, against the suggestions of self-love or interest, only the cold and abstract principle of obligation. Beside, the contents of this obligation itself is something so vague, so wanting in precision, that this principle, under this ill-defined form, resembles a net with coarse meshes ; the elastic tissue of which will, so soon as we strongly desire it, suffer the grossest immorality to pass through.

Such are the objections which the will makes. The *intellect* has also objections of its own. It is anxious to account for every thing. It wants to know upon what foundation rests the exorable authority of moral obligation. Here is an imperious master that can at any instant claim the most painful sacrifices. The intellect would demand to know the title it can have to so absolute a right of sovereignty. Now, it seems to the intellect that duty when questioned gives no answer. Moreover, the intellect looks for the sanction of the obligation. It wishes to know who will become responsible for repairing the violations of duty, and for indemnifying a man, if, after having been faithful to it, he come to be the victim of the unfaithfulness of another. And here again the system remains dumb. Let us speak frankly.

Either God does not exist, and, in this case, who imposes upon me moral obligation ? Who determines its contents ? Who watches over its fulfilment ? Who guarantees its inviolability ?

Or, God does exist, and then how can it be that this supreme moral personality, this Being who, if He exists, must be the living good, plays no part in the sphere of moral obligation, how can He but be Himself its supreme object ?

And what does *feeling*, too, say with regard to this principle

of duty for duty? Its boundless aspirations, its bold flights, scarcely accommodate themselves to this honorable but cold principle. In the depth of every human heart there is an instinct which nothing can stifle, and which manifests itself now by an insatiable ambition, now again by an overwhelming sadness—the thirst for the infinite. This thirst cannot be slaked in the abstract principle of moral obligation. Uprightness, kindness, moderation, we may have kept all these duties from our youth—I take as a witness the rich young man of the gospel—and yet be like the thirsty hart panting after the water-brooks.

Pleasure, knowledge, duty, all these good things must certainly enter into the fulfilment of the destination of man. Neither Epicurus, nor Plato, nor the Stoics went completely astray. But no one of them gave the true solution. We have not yet contemplated the haven in which man can rest with the conviction of a destination fulfilled.

IV.

To what guide must we apply that we may commit to it the prosecution of our search, and attain, if possible, the solution of which we are in quest?

Once again: to nature, to physical and moral nature, which has been the counsellor of our first steps in this investigation. The more nature is studied, the more we discover in it a school of divine wisdom.

I. What do we see in the domains of nature inferior to ourselves? Each being tending to associate itself and unite with some being of an order superior to it, in favor of which it becomes a means. Thus the plant does not confine itself to accomplishing the cycle of its yearly vegetation, it enters as an integral factor in the operation of the life of beings superior to itself—animals. In every animal, in man himself, there is a certain number of functions to which physiology has given the name of *vegetable life*, and which are only the organic incorporation of the plant in the animal.

Such is also, on a higher scale, the relation between the animal and man. And I refer here not merely to that palpable fact, that physical, or so-called *animal* life is and remains the

basis of all human existence ; as vegetable life is that of all animal life. I apply myself to an order of more exalted considerations, and here is what strikes me in this respect in the organization of nature. The animal does not aspire to become a man, any more than the plant aspires to transform itself into an animal. None the less, however, does it tend toward man. Its ambition is to join us. We discern this tendency of the animal world toward man in the rising series of animal creations that have succeeded one another on our earth before the appearance of man. These successive organisms, indeed, have more and more approached the human type, and have ceased to advance toward it only when this type, itself appeared. It was man whom they were seeking.

We will notice, also, the attraction exercised by man over the animal world among the higher animals which admit, in a manner much more distinct than the inferior animals, the ascendancy of human personality, even to laying aside their most deep-rooted instincts of ferocity under the fascinating glance of their tamer.

But it is especially on the pinnacle of the animal world, among the domestic animals, that we are met by the demonstrative proof of the aspiration which impels the beings of nature to join themselves to man. Here you see the animal world in some sort *humanizing* itself, grouping around our persons, like a crowd of faithful subjects who love to associate themselves with our labors, who with docility place at our disposal strength often superior to ours, and who often seem to be happy only when in society with us.

In this general organization of nature there is revealed a fundamental law ; it is that *every being tends upward* ; and in this aspiration must be found at once the index and the measure of that being's ultimate design.

Man also has his aspiration. As the animal tends, not to become a man, but to associate itself with man, so man aspires, not to become the infinite Being, but to unite with Him by partaking of His perfect absolute existence. In proportion as this infinite Being discloses Himself to him—in nature, as wisdom and omnipotence ; in the conscience, as justice and holiness ; in the intimate impressions of our heart as supreme goodness—there

is awakened in us the feeling of our moral relationship with Him, and the need of communicating with this invisible and unknown Father. There is an irresistible drawing toward that glorious and limitless life, that infinitely rich life of which we daily contemplate the proofs in the excellence, in the beauty, in the greatness, and in the infinite variety of its works. This is the attraction under the influence of which the Israelitish singer uttered that sublime cry : " My soul thirsteth for God, for the living God."

To be associated with this mysterious Being, to participate in His thoughts, to serve as an agent for His power and His love, to be a fellow-laborer in His work, this is the ideal which, more or less distinctly formulated, reveals itself to our soul and becomes the object of our supreme aspiration. This instinct is not a blind, unthinking attraction, like the attachment of the animal to its master. It is a luminous intuition, a prophetic presentiment which, once formed within us, appeals to our liberty, draws after it all our faculties, and determines the direction of our life. It is the revelation of the mystery of our destination.

Our ultimate design, thus understood, comprises two things which I shall express by means of a formula borrowed from a form of speech familiar to you : *We in God, and God in us.*

We in God : by the abdication of our own will, by the renunciation of our fallible thought, by the despoiling of our vain and egotistic self, in order to affirm in lieu of ourselves, God, His will, His thought, His supreme person, even when we still have only a dim perception of it. This is the first act ; it is the emptiness to be wrought within us, in order that we may receive and possess something better than ourselves.

Next the answer, God in us : as a result of His infinite condescension toward His creature. God in us, by the revelation of His thought to our intellect, by the communication of His creative power to our will, by the indwelling of His person itself in our heart. Such is the second work, which stands related to the first as fulness to emptiness.

O man ! go out of thyself to transport thyself and place thyself in God ; and may that God, leaving His infinite depths, abase Himself to thee to operate in thee, that in this meeting,

the infinite Spirit may find in thee, a finite spirit, the free agent and the joyful instrument of His perfect life, and thy destination, O man ! whoever thou mayest be, is fulfilled. Thou couldst not conceive of one less exalted without degrading thyself ; nor one more exalted without the loss of reason.

II. Let us submit this solution to the test to which we have subjected the preceding solutions. Does it answer the three conditions indicated ?

It certainly applies to *all men*. What finite spirit could be deprived of the right of intercourse with the infinite Spirit from which it is an emanation ? What worldly position could rise, like an impenetrable barrier, between the *Father of the spirits of all flesh* and the human soul which is His breath ? In suffering, nothing could prevent us from approaching Him by the humble sacrifice of submission. In prosperity, what more natural than that we should turn to Him with the impulse of gratitude ? Thus every thing in life may become the occasion of a living contact between our soul and this infinite Spirit.

It is certain, again, that the human destination thus understood embraces the *whole man* : our will, which henceforth tends only to offer itself as an agent for the divine will ; our intellect, which aspires only to discern the thought of God realized in His works, in order to revolve it in thought and celebrate it ; our heart, in fine, which, as one of the church fathers has remarked, “ finds rest”—the full delight of existence—“ only when it rests in God.” All our faculties are thus exalted to their highest power by their exercise in God.

Finally, is there a *moment of human life* which must remain a stranger to such a destination ? May not the most insignificant act of life be accomplished in view of God ? “ Whether ye eat, or drink, or whatsoever ye do,” said a man whose actions always matched his words, “ do all to the glory of God.” The end of life thus understood is placed sufficiently high to command the whole of it, and yet is put near enough to us to be at every moment within our reach, and in some sort to fall within our hand in every act of our existence. This solution even stands the test of the supreme moment, that of our final exhaustion. Nay, rather it is at that moment that it triumphs.

III. It is so true that this solution of the problem of life is

the true one, that it contains in itself all the portion of truth possessed by the three solutions previously tried.

Where could *pleasure* better have its place in human existence than where a filial heart relishes each blessing as the gift of the love of an invisible Father, and culls each pleasure on the path of life as a flower sown by that tender hand?

Where could *knowledge* flourish more magnificently and produce more savory fruit than when this noble activity, instead of being tainted by the vile stimulants of selfishness, pride, or cupidity, sets before it as the supreme end to discover the thought of the Creator in each of His works, to make it resplendent in the eyes of all, and thus becomes a hymn to the glory of His wisdom?

And when will *the fulfilment of duty* be more solidly guaranteed than when it shall rest on the feeling of obligation toward God himself? Be not anxious respecting the uprightness and kindness of a man toward his fellows from the moment that he is resolved to love God above every thing, and has given his heart to Him in earnest. What constitutes the cohesion of the points in a circumference, is not their accidental juxtaposition in relation to one another; it is the invisible radius uniting each of them to the centre of the circle. Never will a man succeed in *loving his neighbor as himself* until he has laid down before God the despotic autonomy and egotistic independence of self, and consented first to *love God with all his heart, with all his soul, and with all his mind.*

Duty holily performed, knowledge humbly cultivated, pleasure purely tasted, these are the different forms of a worship in spirit and in truth which rises ceaselessly toward heaven from the sanctuary of a soul thoughtful and living in God.

IV. And it is not only each human soul, but also the entire *species* that finds in this solution the explanation of the mystery of its final design.

A single finite mind could not display all the wealth of the infinite Being. As the life of nature could not unfold itself in one single and solitary plant, and requires those one hundred thousand species of trees and flowers that compose the vegetable kingdom, to offer to our senses all the abundance and diversity of forms, of colors, of scents, of savors, of virtues,

which nature conceals in her bosom ; so does it require an entire company of free and intelligent minds to manifest the fulness of perfections and strength which the creative Spirit contains in Himself. And if the final design of each individual is formulated in the expression, He in God, God in him, the destination of the whole species, being necessarily the result of the individual destinations, will be expressed in words which long ago were uttered by the mouth of a holy man : “ *God all in all.* ”

Do we see in thought, advancing upon the theatre of a purified earth, the majestic band of the fellow-workers with God ?—here the manufacturers, authors of a world of wonders which shall eclipse these numberless masterpieces which we here behold ; there the merchants, who, in the midst of universal peace, will enrich the entire globe with the precious products of every part ; there creative minds in the domain of art, each exerting himself to his utmost to invest all this labor with the splendor of beauty. Here, on the other hand, are the scientific laborers, the explorers of nature, with their microscopes, their retorts, their compasses, their gigantic telescopes ; the delvers into history, extracting from the dust of libraries the intelligible picture of the past ; the searchers for truth, the philosophers striving to reach the sublime thought which both hides and reveals itself in the measureless phenomenon of the universe. This is not all. Yonder are the organizers of social life, the guides of that public administration which maintains order in all these spheres, the depositaries of justice, and, last of all, the interpreters of religious feeling. All this army of free workers is moving under the influence of a single inspiration, the spirit of a holy love, toward a single end, placed high enough to be the aim for all, and low enough to be incarnated immediately in the work of each. . . . Here is the collective destination. It is the kingdom of God in man, or, if you prefer it, of man in God. And, as the result, the earth transformed into heaven—that is to say, heaven realized on the earth ; until, in an economy still higher, this kingdom of God, consummated here below, shall burst forth, shall spread gradually from place to place, from sphere to sphere, to the farthest extremities of the intelligent universe by the ministry of man, become,

as an individual and as a species, the executor of God's plan, the messenger of universal love.

V. And, what is remarkable, from the point which we have reached, casting a glance backward, we can account for the *forms of existence* which preceded ours here below, and the thought that presided at their appearance.

What does the existence of *the plant* signify? We behold in it the pleasing spectacle of a being which unfolds without resistance and yields without distrust to the mysterious power of nature. While the latter, like a tender mother, liberally communicates to this frail and delicate existence a sap that will unfold in it a wealth of savors, of perfumes, of forms, and of colors, the plant receives all silently and without effort, and pretends to be nothing more nor less than what that rich communication of the infinite, from which it lives, will grant it to be.

Have we not recognized the emblem, and, if one may say so, the parable of the relation between man and the infinite Being who has conferred life upon him? Man yielding himself up to God with complete surrender, God communicating Himself to man in the riches of His infinite munificence.

What then is the meaning of the existence which we call the flower? It is the image of our fulfilled destination. The world of plants is a picture-book, the book with one hundred thousand drawings, by each one of which the Creator gives us this kind lesson: "Do in reference to Me, with freedom and self-surrender, O man, what this plant unconsciously does in reference to nature! Open thyself to the action of My spirit, and I will unfold in thee perfections of wisdom, of beauty, of strength, and of love, superior even to those which thou admirerest in these existences."

That prince of modern poets had heard this sublime language addressed by the floral world to man's heart, who, in a couplet which our tongue can but imperfectly render, said:

"The flower has a divine secret to reveal to thee; it tells how a moist dust can be clad with the glory of heaven."

This perhaps explains the spell which the world of plants exercises over the soul wearied by the battle of life, the quieting and soothing influence that is so naturally evolved. The flower represents to us our ultimate design fulfilled, our ideal

realized. Realized? Yes, but only in painting. For there is wanting to the plant what is wanting to Nature herself, of which it is the daughter, freedom. The plant is what the creature ought to be, but without having *willed* so to be.

What a contrast between the vegetable and the animal world! Here we encounter, if not freedom, at least spontaneous motion, which is its prelude. In passing from the plant to the animal, we enter into the toil of life, with its emotions, its appetites, its violence, its dangers, its conflicts, its sorrows. We are in the sphere of earnest and terrible reality. The bloody contest for existence has begun, and paves the way for the appearance of the being in whom the ideal is at length to be realized, not merely under the form of a graceful emblem, but under that of a true life. We are visibly approaching the being in whom the free surrender of the finite mind will meet the generous love of the infinite Being.

We can readily see it: the plant is graceful poetry; the animal world is severe history. Man is the keystone of the arch in which these two domains of nature inferior to him converge; he is the crowning point of history and the realization of poetry, the living and free link between the whole of nature below him and the God who created it for him.

V.

In perusing the solution of the problem of our ultimate design, thus set forth, the reader might have had constantly in his heart an objection: "It is all very good! I in God, God in me. I can indeed conceive of nothing more desirable, nothing more grand. Only, how can I reach such a state? God is in heaven, lost in the inaccessible infinitude of His essence; I am on the earth, imprisoned in the inclosure of the finite, of matter; separated from God by a wall even more massive than the contrast of nature, by my evil instincts and by the many faults into which they have led me."

In reflecting upon the solution to which we have been conducted on the road of moral experience and of natural induction, the thought may arise: "This solution is the Christian solution!" And nevertheless we have not once introduced

into our study *revelation*, Christianity. The fact is that Christianity, without pretending to be a philosophy, none the less here below brings, as it were, under the folds of its cloak, a philosophy, and the truest philosophy. But let us hasten to add that it is itself quite another thing from, and better than, the best philosophy. Christianity is a fact, the capital fact of our history. It is the ultimate design of man, not only taught but realized. It is the appearance of a living being, of a real person, who says to humanity : "I am the truth, more even than the truth, *I am the truth and the life.*"

Christianity is, indeed, too wise to be only wise. It fathoms too lovingly and with too much pity the deficiencies of our life, the depths of our impotence, the abyss of our moral forfeiture, to confine itself to saying : "O man, here is thy destination ! Raise thyself up to God ; unite thyself to Him ; fill thyself with His perfect life and become His blessed instrument." The Gospel knows too well that to such an invitation we would answer with bitterness, "Give me the ladder that I may be able to scale those heavens." It takes good care also not to reveal to us our destination under the form of a moral law, of a categorical command, or of a poetical ideal. It sets forth the law, the ideal, in distinct history, realized in a being of flesh and bones, like ourselves, whose whole existence is the living illustration of this formula : Man in God, God in man.

In this being, who may be called the divine life lived humanly, the abyss between the infinite God and finite man is filled up. In contemplating it we exclaim : "*Behold the man ! Behold my ideal realized !*"

"Yes," one will exclaim, "realized but in one person, in one person only ! And what do all others gain?" The Gospel has anticipated this objection and answered it beforehand. It says to us : "In one *for all !*" Precisely because this ideal is not a simple idea, but a person, a life, it possesses the faculty inherent in all life of reproducing itself. "As the living Father hath sent me, and I live by the Father ; so he that eateth me, even he shall live by me."¹ So speaks the God-man ; he lives from the Father, his life is a constant assimilation and reproduction of God. It remains for us only to *eat him* ; that is the

¹ John vi. 57.

emblem of the most personal and intimate assimilation of which we can conceive ; and as God reproduces His life in him, he reproduces in us his own life, which is that of God.

When the invisible forces of nature are to be communicated to us for the support of our body fainting from inanition, they do not remain in their invisible state ; they are condensed, they become tangible and capable of being seized in a material aliment, in that fruit, in that piece of bread which you can grasp in your hand and carry to your mouth. So when the infinite Being was pleased to convey to man His perfect life, He did not remain in His inaccessible spiritual nature ; He became incarnate in a human being like unto us, in the person, acts, and words of whom He, as it were, condensed His divine life. And this Being calls us to Himself, saying : “ I am the bread of life which came down from heaven to give life unto the world.”

But just as when we are desirous of sustaining our exhausted strength, we do not content ourselves with meditating philosophically or with dreaming poetically about the life-giving power of nature, but we must come and place our hand upon the piece of bread and assimilate it to ourselves ; so in order to appropriate the life of the great Unknown, whose invisible presence envelops us, and to unite ourselves to Him, of what use would it be for us to give ourselves up to the loftiest philosophical speculations, or even to rise to heaven upon the wings of religious aspiration ? A simple, distinct, decisive act is needed, an act in which all the powers of our being co-operate—heart, intellect, will ; we must have *faith* by which we seize the bread of life which came down from heaven, and bringing it near to our heart, eat it. At once it reproduces itself in us spiritually by its own virtue, and transforms us into its image and its proper substance.

With a conscience broken with the feeling of sin, to drink at the fountain of pardon opened in His sacrifice, for sin and uncleanness, this is *to drink His blood*. With a heart hungering for holiness, to feed on the contemplation of His person, His acts, and His words, and to entreat that Lord, who is the *life-giving Spirit*, to live again in us, this is *to eat His flesh*. The work of incarnation which He accomplished in His own person

is continued in us from this moment. Open to Him, welcome Him, and in Him God who lives in Him, and in response to this act of absolute sympathy for Him, God on His side, sympathizing with you, will incline to us, will communicate Himself to us, and will make of us His dwelling-place. And having thus become the depositaries of His perfect life, the agents of His omnipotence, the instruments of His infinite love, the bearers of universal peace, we will have solved the problem of the ultimate design of man ; better than in theory and in words, we will ourselves be its living and blessed solution.

FREDERIC GODET.

HOW CONGRESS AND THE PUBLIC DEAL WITH A GREAT REVENUE AND INDUSTRIAL PROBLEM.

THAT it is entirely practicable, through wise economic legislation—*i.e.*, in respect to taxation, banking, currency, the relations of capital to labor, interstate and foreign commerce, and the like—to healthfully, largely, and speedily promote our national development, increase the opportunities for profitable labor, and so the consequent comfort and abundance of the masses, is a proposition about which there is a very general concurrence of public sentiment. Judging, however, from recent experience—the only criterion for safe judgment—any expectation of the speedy attainment of any such result is not likely to be realized. And in evidence of such most unsatisfactory conclusion, and with a faint hope that its presentation may in some degree prove remedial, it is proposed to here tell the story of what has happened in a recent case, pre-eminently demanding wise legislation in the interests of all our people as consumers; of the laborer seeking employment; of the national revenue; of the prosperity of our seaboard cities, and of our foreign commerce and carrying trade. The material for this presentation is to be found in the case of the single article of sugar in its relations to consumption, foreign commerce, domestic industry, and national revenue.

Few, other than those who have made the subject a specialty of study, realize the extent to which sugar has become a factor in the great aggregate of the world's business and a necessity in the world's consumption; and to all, the statement of numerical results can convey little except the indefinite, general idea of *bigness*. Nevertheless it is necessary to make certain statistical

statements as a starting-point in the proposed discussion, and here they are.

For the whole world, the present annual production of sugar of all kinds is probably about 5,500,000 tons, or in round numbers *twelve thousand millions of pounds* (see how it looks in figures: 12,000,000,000 lbs. !!!); of which quantity about three fourths is the product of the cane and one fourth the product of the sugar-beet. The quantity of sugar derived from other sources is comparatively insignificant.

The general answer to the question, What becomes of all this enormous product of sugar? is, that it is eaten up almost as fast as it is produced, but that the ratio of consumption differs greatly in different countries. Thus, Great Britain, which produces no sugar, and the United States, which produces little in comparison with the amount it consumes, together absorb in the first instance about one third of the entire annual sugar product of the world. In respect to per capita consumption of sugar, Great Britain, however, leads, and for the year 1877 retained for home consumption, out of the total sugar by her imported, an amount equivalent to 64.9 lbs. for each man, woman, and child of her population; while in the United States the present annual consumption is probably about 38 lbs. per capita. This marked difference in the use of sugar by the people of the two countries is due mainly to the circumstance that sugar is largely used in Great Britain for certain purposes to which it has not yet to any great extent been made applicable in the United States, as for distilling, brewing, and the feeding of cattle; and being in addition about 33 per cent cheaper in Great Britain (owing to the removal of all tariff restrictions on its importation) than in the United States, the tendency is naturally to a larger consumption by the masses of the people in the former than in the latter country. As respects other countries, Germany consumes about 19 lbs. of sugar annually per capita, or about half the per capita consumption of the United States; while in Russia the annual consumption runs down as low as 7 lbs. per capita.

In answer to the next question which naturally suggests itself, Where does all the sugar come from? it may be said that, commencing with cane-sugar, the Spanish West Indian islands—

Cuba and Porto Rico—stand first in importance among the sugar producing countries, with an annual product of at least 750,000 tons. The other great sources of sugar, named in the order of their importance, are British India, China, the Islands of the East Indian archipelago, Brazil, the British and French West Indies, the Guianas, the United States (80,000 tons), Peru, Egypt, and Central America; but at the same time there is hardly a tropical region which does not produce sugar, and from which the export of this article does not tend to increase with every increase of its commercial intercourse with the rest of the world.

Passing next to sugar produced from the beet-root, it will be found that altho repeated attempts have been made to establish this industry in England and the United States, it is yet mainly restricted to the states of Continental Europe, the centres of production being, first, France; second, Germany; third, Russia; fourth, Belgium; with a notably smaller product in Austria and Holland, and very little in Sweden and Italy.

In addition to all this sweetening, the manufacture from starch of *glucose*, or grape-sugar—the sugar of grapes, or ripe fruits, of honey, and of seeds—is annually increasing in the United States, and has already become a large factor in our domestic trade and consumption. At present some fifteen factories are reported in this country, producing glucose at the rate of about 500 tons per day, or 360,000,000 lbs. per annum; and as the business is understood to have been extremely profitable, many new factories are projected or in the course of construction. In Europe glucose is made mostly from potatoes, but here it is manufactured almost exclusively from corn.

As the culture of the beet and the sorghum in the United States is at present strongly advocated as sources for the future economical production of sugar, it is pertinent to here call attention to what are believed to be the real facts in that case. That sugar can be produced from the sugar-beet, the sorghum, the stalk of the Indian corn, and from many other plant products, is not to be questioned. But the natural source or supply of sugar, especially for the United States, is the sugar-cane, and whoever undertakes to manufacture sugar from any other source practically invites Nature to be his competitor; for in

the proper localities—*i.e.*, the tropics—the sugar-cane grows spontaneously, and can be made to yield sugar at a cost that under natural conditions will absolutely preclude competition from sugar produced under any other circumstances; and such localities, if not at present actually embraced within the territory of the United States, have, by the improvements in transportation, been brought closer to the doors of a majority of our consumers than are the wheat-fields of the North-west. In Europe, in the case of the beet, the natural advantages of the cane are in a degree overcome by a supply of cheap labor—women and children—which does not exist in the United States, and by an economic utilization of all the waste product of its manufacture, which is at present also foreign to the habits of our people; while in the case of the sorghum the saccharine product in the first instance is always of low grade, fluctuating as respects quantity and quality with variations in the seasons, and necessarily requiring, for refinement into a fair marketable article, a degree of skill and expense and a use of machinery which is far beyond the reach of the ordinary agriculturist. Whoever, therefore, recommends the diversion of labor and capital in the United States into the cultivation of the beet-root or the sorghum with a view to the profitable manufacture of sugar therefrom, recommends an investment that is certainly risky and will probably prove disastrous.

In round numbers, the people of the United States at present consume annually about a billion nine hundred million (1,900,000,000) pounds of sugar derived from the cane and the beet (the latter, however, in very small proportion); and of this quantity more than 90 per cent during the year 1879 was the product of foreign countries. The business of transporting sugar—including under this term molasses and all syrups—constitutes, therefore, a great item in the foreign commerce of the United States. In point of fact, it constitutes the largest item in the list of the commodities we import in respect to both value and quantity: in value representing about *one seventh* of the aggregate of all our imports; while of the quantity involved some idea may be formed from the statement that if the vessels employed in the sugar trade have each an average capacity of 500 tons (of 2000 lbs.), the importation of sugar must furnish

a present annual business to the shipping interest to the extent of some *seventeen hundred cargoes*.

Sugar, as an article of very large and constant consumption, has in modern times been regarded by most governments as an especially suitable and convenient source for obtaining revenue by taxation; and in the United States, from the formation of the government, the receipts from the duties on imported sugars have always constituted a large proportion of the national revenues. The average tariff on all imported sugars is at present about 60 per cent; and for the year 1879, out of a total customs revenue of \$133,159,025, \$38,065,803, or 28.58 per cent, was received from sugar, or 30.24 per cent if the imports of molasses be included. As our present average tariff is about 42 per cent on all dutiable imports, it will be seen that the existing customs rates on sugars—amounting specifically to at least three cents per pound, or six dollars per barrel of two hundred pounds, on the lowest grades of sugar really fit for consumption—are exceptionally high. The result is that this essential article of food to the people is higher in price in the United States than in most countries. Whether a reduction of the duty would, however, result in a larger domestic consumption is an open question, as our people, in respect to what they regard as the necessities of life, are not accustomed to calculate and live as closely as the people of Europe; but in Great Britain, when, by the repeal in 1874 of all duties on the import of sugar, the price was considerably reduced, so as to make it about one third cheaper than in the United States, the importations the next succeeding year increased more than a million hundredweight, while the increase in the importation of molasses for the same time exceeded 100 per cent.

To this sketch of the relations of sugar to the foreign commerce and carrying trade of the country, to its agriculture, and its national revenues, it remains to be added that at present no branch of domestic industry in all of these several relations is in a more unsatisfactory and troubled condition; and the problem of how to settle this difficulty is second to none in economic importance—currency excepted—that can at present claim the attention of our people. The source of the trouble is to be found primarily in the methods

adopted by the government—wholly irrespective of any question of free trade or protection—for the collection of duties on the importations of sugar, and which, altho when first established were substantially correct both in theory and practice, have very curiously and recently been in a great measure rendered worthless by the improvements in industrial processes. To understand how this has come about it is necessary to premise that the sugars of commerce differ widely as respects purity, and therefore as respects value. The lowest grades of sugars are almost black from the presence of impurities, and by the ordinary observer would hardly be recognized as sugar; the highest are almost chemically pure, translucent, or brilliant in their whiteness; and between these two extremes there is every intermediate grade of color, purity, and price. The problem of how to readily determine the commercial value of different sugars is obviously, therefore, a most important one. The Dutch, as owners and venders of the large sugar product of the island of Java, undertook many years ago to solve it by founding a standard on the assumption that color in sugars is the certain indication of their purity or value, and practically carrying it out by assigning to the lowest grade of sugars found in commerce a given number as a unit of color—as, for example, the number 4—and making every additional higher number represent a progressive gain in color, and if in color, then inferentially also a corresponding gain in saccharine strength or commercial value. The standards as thus arranged by the Dutch gradually came into extensive use throughout the world for the classification and designation of the sugars of commerce, and as the basis for the assessment of customs; specified samples of sugar, corresponding to the different numbers, and hermetically sealed in glass bottles, being annually prepared and distributed by the Dutch authorities. All sugars, according to the Dutch standard, which grade below No. 7 in color are the typically crude sugars, simply purged from molasses, and really constitute the raw material for every further process of manufacture. And every grade of sugar above No. 7 may be regarded as an advanced manufacture, every step forward in which reduces (brightens) the color and increases the cost, through the added expense of labor and capital.

The number 13 on the Dutch scale is generally accepted as indicating the line between sugars which are the result of the original process of manufacture and sugars which have been refined or subjected to a further and independent process of purification. Sugars designated as No. 20 or upwards are destitute of color or white, and are of the highest degrees of purity.

At the time the Dutch standard was instituted and for many years afterwards it constituted an approximately accurate method of determining the value of sugars; and for sugars above No. 13 it is still regarded as satisfactory, for the reason that above that number the relation between color and saccharine strength or purity, and therefore value, is unquestionably definite. But below No. 13 no such relation can be positively affirmed to exist in respect to any sample of sugar; for the improvements in the processes for making sugar now at the command of every planter who can afford to pay for the somewhat expensive machinery involved, enable him to turn out sugars of as high degree of saccharine strength as 96° (100 representing purity), with a coloration which in the case of the ordinary or old-process sugars, would, according to the Dutch standard, have represented a sugar of not more than 80° to 86° strength, and from 25 to 40 per cent lower valuation. And as the provisions of the United States tariff in respect to the importation of sugar (enacted in 1870) prescribe only the use of the Dutch standard for valuation and assessment—the duties rising and falling rapidly as color changes from dark to light and *vice versa*—and as any excess of color in the new-process sugars does not materially impair their value for refining purposes, the opportunity for great gain afforded to the sugar importer, by complying with the letter but evading the spirit of the tariff, is most obvious. And this opportunity human nature, especially human nature as it exists in the Spanish West India islands and Demerara—the countries where the “new process” has thus far been mainly introduced—has not been slow to embrace. How long sugars continued to be imported under such circumstances without interference on the part of Federal officials, and what profits accrued in consequence to the importers, are not definitely known. It certainly continued several years, and the profits

accruing therefrom were estimated some years ago by a Congressional committee to have aggregated as much as five millions of dollars per annum. The evasion in question also injured and even threatened destruction to former great lines of established trade, inasmuch as the low-grade and low-cost sugars—the special products of the East Indies and Brazil—manufactured by the old process, and in which color is a true coefficient of value, were subjected to the same rates of duty as sugars of much higher intrinsic value imported from Cuba; which amounting to a discrimination of from 20 to 30 per cent against the former, naturally tended to drive them from our markets and still further diminish the already small business of our decaying American shipping.

No serious attempt was, however, really made by the government to put a stop to this business until 1867, when a cargo of Demerara sugars consigned to one of the leading importers in Baltimore was seized on the charge of being artificially colored with intent to defraud the revenue, and on appeal the case was carried to the U. S. Court. The trial was long and expensive, and the claims of the government were at every step resisted; but the jury found that the sugar in question, which had been entered as of the lowest grade, was really of high grade and had been artificially colored with intent to evade the payment of the proper duties; the Court at the same time saying to the officials, as the rule for their guidance in determining the value of sugars for assessment: "You must look through the artificial coloring, and the sugar should be classified according to the color which it would bear if it were not artificially colored." The cargo in question was not forfeited, as the jury found that the Baltimore importers were not in any way parties to the fraud; but the Treasury Department immediately issued stringent orders to its officials to advance the duties on all imported sugars artificially colored, to exact fines and forfeitures where fraud could be found, and to adopt other measures than comparison with the Dutch standards to ascertained the true value of sugars; more especially the use of an optical instrument called the polariscope, which merchants generally had before resorted to in order to protect themselves in dealing in sugars, and which when properly used is acknowledged to show the real saccharine strength

of sugar, with such unfailing accuracy that no cargo of sugar in respect to the commercial value of which there is any dispute, is now ever bought or sold anywhere in the world, except upon the polariscope determination.

As usual the orders of the Treasury were executed in the most arbitrary manner, and in strict accordance with the time-honored principle that in matters of the revenue the merchants have no rights which the government is bound to respect; as a matter of course, also, complaints on the part of merchants and refiners became general. It was alleged, and probably with truth, that appraisers one day and in one port admitted a cargo of sugars as *not* artificially colored, and on another day and in another port similar cargoes were condemned as artificially colored; and also that through favoritism the importations of certain merchants were habitually undervalued. But what different results could have been expected from men appointed for reasons other than special fitness for their trusts, and when the honest and efficient discharge of duty constituted no certain guarantee of tenure of office? It was also claimed that the coloration of sugars declared fraudulent was not artificial, but the result of purely legitimate and normal practices of manufacture; and that the employment of the polariscope by order of the Secretary of the Treasury to determine the value of sugars, when the law specifically prescribed the use of the Dutch standard, and none other, was an "audacious" and illegal assumption of authority. Very many importers of sugars have accordingly paid their duties during recent years under protest, and a large number of suits against the government for the recovery of excess of duties have also been instituted.

The government, on the other hand, in the spring of 1879 despatched two of its most experienced revenue agents to Cuba to make investigations on the plantations where great quantities of sugar are manufactured for the American market; and also caused to be made public a communication to the State Department covering the results of a commission created by the Colonial Government of Demerara during the same year for the purpose of investigating the evidence in regard to the coloring of sugars in that colony brought out in the Baltimore case before mentioned. The facts developed by these inquiries are most remarkable;

altho they do not appear to have as yet been noticed by the American press, or to have excited the least interest on the part of the general public. In Cuba and Demerara alike there was no pretence of concealment that sugars were intentionally manufactured in such a way that the highest qualities might be imported into the United States on payment of the lowest duties; and it was also admitted that this was done under the positive instructions of the importers.

The government experts found, that altho in some instances "caramel" (burnt sugar), aniline dyes, iodine, and other substances had been used in Cuba and Demerara for degrading the color of sugars without essentially impairing their strength, yet the same end could be more easily attained by merely varying the processes of manufacture; *i.e.*, increasing the amount of lime always added to the fresh juice for purification, and applying a high degree of heat to the vacuum-pan in the last stages of the boiling.

Such, then, is a brief sketch of the circumstances under which the sugar problem, some three years ago, came primarily before Congress as the court of appeal and relief from a condition of affairs which all parties are agreed is most unsatisfactory and detrimental in the highest degree to the business of the country. But all parties are not agreed as to the methods of relief; on the contrary, they are in sharp antagonism. A majority in number of the importers of sugar—but not representing a majority of the quantity imported—ask that Congress will simplify the tariff by imposing a uniform rate of duty on all sugars below and including No. 13, which is generally accepted as the line dividing sugars which are the result of the original process of manufacture and sugars which have been refined or purified by other and independent processes. The Treasury officials have recommended the retention of the present classification and the Dutch standard, supplemented by the use of the polariscope. All the Boston importers at one time agreed to recommend a classification and assessment of duties founded on the use of the polariscope exclusively, and the discarding of all other methods. The Louisiana sugar producers also take an interest in the matter, but the sphere of their interest appears to be limited to an apprehension lest, as an outcome of the

trouble, they may fail to retain a higher tax on sugar than is levied on silks, laces, wines, jewellery, and other articles of pure luxury. Finally, as the result of several years' discussion and investigation, the opinion is gaining ground that the interest of all concerned would be best promoted by assessing all imported sugars at some uniform rate of duty according to their value; or as it is technically termed, on the *ad valorem* system..

The proposition urged most strenuously upon Congress for adoption is, that a single specific rate of duty shall be levied on all raw sugars, or sugars not above No. 13, Dutch Standard, with a view of preventing frauds in importations and simplifying the collection of revenue. As the frauds in question however consist in so altering the character of certain sugars, that revenue officers being deceived, shall admit high-grade and high-priced sugars at the same duty as low-grade and low-cost sugars—the intent of the law being that all shall pay in proportion to their value—the proposal that all grades hereafter shall pay but one and the same duty, is equivalent to asking that, that which is now illegal and unjust to other associated interest, and which defrauds the Treasury, shall hereafter be made legal.

Viewed also from the stand-point of equity and expediency, the proposition to assess all the varieties of imported raw sugars at one and the same rate of duty is something extraordinary. The United States, for the attainment of its fullest material development as a nation, must have foreign commerce. It desires to attract all nations to its markets; and except when it is itself made the subject of discrimination, it must, for the attainment of this end, admit to equal privileges the people of all nations desiring commercial intercourse. Were the proposition soberly made to discriminate specially and by name, in our commercial laws, against any one, two, or more unoffending nations, the proponent would be speedily hooted into silence. But the proposition to assess raw sugars at one rate embodies this very thing. Thus, to illustrate: the sugars produced in countries of low civilization like Brazil, Central America, the East Indies, and the like, constituting the bulk of the sugar product of the world, are low in grade and price, and necessarily so because these countries lack intelligence and capital. Let

any one take his stand at one of the wharves of New York or other ports, and he will sometimes see sugar unloading, almost black in color and enclosed in palm-leaf bags, of a weight and form suitable to carry on men's backs. Such sugars are evidently the product of countries wanting in roads and beasts of burden, and in facilities for even making lime for use in purification. Such sugars are, however, capable of purification without difficulty, and afford the largest basis in so doing for the profitable employment of domestic labor and capital. The producers, furthermore, must sell them in our markets if they in return are to buy any of the products of our skill and machinery, for they have little or nothing else to buy with. The average cost of such sugars is from $2\frac{1}{2}$ to 3 cents per pound, on which a proposed uniform rate of duty of $2\frac{1}{2}$ cents would be from 80 to 100 per cent *ad valorem*. But the same rate of duty on sugars from Cuba and Demerara, which are further advanced in manufacture and worth, on an average, five cents per pound, would be but 50 per cent *ad valorem*. It needs no argument to prove that so long as Cuba and Demerara were able to supply sugar under such a tariff—and with such bounty in their favor, production would certainly be pushed to the utmost—there would be no trade for sugar with Brazil, the East Indies and Central America; no market in these and like countries for our produce and manufactures, and no employment in this sphere for our shipping; for ships to be profitably employed must have *return* as well as *outward* freights.

Again, it is an axiom of the present (protective) fiscal policy of this country, with a view of encouraging the growth of American manufactures—to admit their raw materials, the produce of foreign countries, especially such as do not compete with our domestic products—as ivory, gums, dye-stuffs, fibres, etc., either free or at low duties. But the proposal to assess all grades of raw sugar at one specific rate is a clear reversal of this policy, inasmuch as it discriminates or prevents the importation of a truly crude material which a great branch of domestic industry demands, and at the same time and in the same degree offers a bounty for the development of a rival branch of the same industry in a foreign country. If, however, it is said

in reply that this government cannot effectually collect the revenue from sugar on any other system of duties, the question at once suggests itself, Does industry in this great republic exist for the government or the government for the industry; and with a present annual surplus revenue of near one hundred millions, is it necessary to cripple any branch of domestic industry in order to collect revenue? But the assertion is not true. The Treasury is satisfied, and its Secretary has informed Congress that, under the present system, with the authorized use of the polariscope, as an adjunct to detect the artificial degradation of color, it can, and at present does, approximately collect the duties on imports of sugar; and with the conservatism of officials, the Treasury proposes nothing further.

But there is something further in this business of the utmost importance to the country which ought to have earnest consideration, but which, unfortunately, thus far has not received it. The business of refining sugars in the United States, measured by the value of its products, ranks as the ninth industry in the country. Great as is its present magnitude, it is capable, through wise legislation, of being greatly extended and of so adding largely to the opportunities for labor, for the employment of American shipping, and to the value of real estate in our seaboard cities. For such has been the skill which Americans have brought to this business, and such their invention and use of machinery, that sugar can now unquestionably be refined in the United States cheaper than in Europe—to the extent, it is claimed, of a quarter of a cent a pound—with a payment at the same time of comparatively high wages to labor. If, therefore, the importations of raw sugars into this country were free—as Great Britain has recently made them—the export of refined sugars to foreign countries would speedily attain to great magnitude, and take rank with the exports of cotton, the cereals, provisions, and petroleum. As, however, no such event is likely, the next best thing to do is to arrange a sugar tariff, such as, after providing for Congressional requirements in respect to revenue and protection, shall aid in the development of this great branch of domestic industry to the extent, at least, of not needlessly restricting. For this end the existing tariff is as ill-

arranged as possible; and the idea that protection could be given in this, as well as other specialities of industry, by a skilful adjustment of duties, full as well, if not better, than by a lumping increase of taxes, seems rarely to find a place in the minds of our law-makers.

Now, how to modify the tariff and at the same time afford all the revenue and protection which the government and Louisiana respectively demand, is the problem under consideration, and in respect to which there is little agreement. But in view of all the facts, the best, the simplest, and the most equitable course would seem to be to adopt the exclusively *ad valorem* system in the assessment of duties on imported sugars; that is, fix on the rate of duty it is desirable to impose—40, 50, 60, or, if need be, 100 per cent—and then apply it impartially to the value of all sugars, from whatever countries imported; the Secretary of the Treasury being at the same time empowered to determine values by the use of all such agencies as he may deem expedient. The only objection that can be made to this course is embodied in the assertion that the government cannot accurately determine the value of sugars. But a sufficient answer to this would seem to be found in the following statements of facts. The sugar business is an enormous and close business, and thousands and millions of pounds constantly change hands at so small a margin of profit that for buyers or sellers to make a mistake in valuation to the extent of an eighth or even a sixteenth of a cent per pound would often be destructive of all profit. But such mistakes are not made, and the system of valuation of sugars, as between merchants, runs with the evenness of clockwork. To assert now that the government cannot successfully adopt the every-day practice of the merchants is simply to assert that honesty and ability in the public service of the United States are unattainable. To such or any other tariff there should also be added, for the sake of encouragement of exports, suitable provisions for manufacturing in bond, or the payment of drawbacks corresponding to the duties collected on the raw materials entering into such exports.

The sugar problem, apart from its features of special interest, has a general claim upon public attention as strikingly illustrat-

ing how great economic questions are dealt with in the United States. Had a matter of like character, affecting the public revenues, foreign commerce, great domestic industries, and the food supplies of the people, come up in Europe, the national government would have at once instituted a thorough investigation; on the Continent through experts not necessarily connected with the government, and in Great Britain through a carefully selected and *special* Parliamentary committee; and as the outcome of this a plan would speedily have been devised, accepted without material amendment, and perhaps without discussion, by government or Parliament, enacted into law, and then carefully watched with a view of amendment as future experience might dictate. A ministry or Parliament moreover that did not keep a sharp look-out for—much more, that treated with indifference—any opportunity to increase trade, extend commerce, and cheapen any great article of production, would soon cease to retain office. In the United States, on the other hand, such matters, if not controlled by private selfish interests, usually drift. In the case in question, the only interest evinced by the executive department of our government has been in respect to revenue: how to collect the largest amount in taxes; the President apparently knowing nothing about the matter; the members of the cabinet, with the exception of the Secretary of the Treasury, caring nothing for it, and the Secretary of the Treasury committing all details and plans in regard to it to his subordinates. In Congress, where the subject has been for several years before one branch, much testimony has been taken by one committee which is always overburdened with other work. Several utterly diverse bills have been reported, always too late in the session to be carefully or at all considered, with a final result of nothing accomplished and a very dubious outlook for the future. To the ordinary Congressman the subject is wearisome, and if he takes any interest in it whatever it is mainly because of the opportunity of some few constituents whom he generally obliges by voting, without investigation, in accordance with their individual interests. Nobody looks out for the interest of the public as a whole, and the public is too indifferent to hold anybody to account for neglect. There is, however, this consolation to fall

back upon, and that is, that in the long-run such questions as the one under consideration always get settled in this country somehow, and generally in such a manner as to recall the proverb that "there is a special providence for infants, drunken men, and the United States."

DAVID A. WELLS.

THE SABBATH QUESTION.

IT is a matter for congratulation that on some points of the Sabbath question there is now no dispute. It is agreed that the setting apart of one day in seven as a special day of rest from labor is a wise and beneficent arrangement for men. The fact of this agreement is not only seen in the prevalence of such a day among different nations—as formerly in their very early, if not in their earliest, history among the Egyptians, Assyrians, Hindus, and Hebrews—and in its adoption when brought to the knowledge of nations where it had not been previously known—as when the Romans adopted it from the Egyptians at about the beginning of the Christian era, and the Japanese adopted it from ourselves in our own time,—but in the remarkable uniformity with which the worth of the Sabbath has been affirmed wherever the question has been intelligently investigated. Most elaborate researches upon this point have been conducted by physiologists, political economists, social reformers, philosophers, jurists, and statesmen, often upon different grounds and with different methods, but always with the same result. Without dwelling here upon the exceedingly copious material which these researches furnish, as illustrating the harmonious conclusion reached by all I only quote two extracts, one from a conservative Englishman and the other from a most intensely radical Frenchman. Blackstone in his “Commentaries” (B. IV. c. 63) says :

“ Besides the notorious indecency and scandal of permitting any secular business to be publicly transacted on that day, in a country professing Christianity, and the corruption of morals which usually follows its profanation, the keeping of one day in seven holy, as a time of relaxation and refreshment as well as for public worship, is of admirable service to a state,

considered merely as a civil institution. It harmonizes by the help of conversation and society the manners of the lower classes, which would otherwise degenerate into a sordid ferocity and savage selfishness of spirit; it enables the industrious workman to resume his occupation in the ensuing week with health and cheerfulness; it imprints on the minds of the people that sense of duty to God so necessary to make them good citizens, but which yet would be worn out and defaced by an unremitting continuance of labor without any stated times of recalling them to the worship of their Maker."

Proudhon in his "*De la Celebration du Dimanche*" (p. 67) says:

"What statistician could have first discovered that in ordinary times the period of labor ought to be to the period of rest in the ratio of six to one? Moses then, having to regulate in a nation the labors and the days, the rests and the festivals, the toils of the body and the exercises of the soul, the interests of hygiene and of morals, political economy and personal subsistence, had recourse to a science of numbers, to a transcendental harmony which embraced all space, duration, movements, spirits, bodies, the sacred and the profane. The certainty of the science is demonstrated by the result. Diminish the week by a single day, the labor is insufficient relatively to the repose; augment it in the same quantity, it becomes excessive. Establish every three days and a half a half-day of relaxation, you multiply by the breaking of the day the loss of time, and in shattering the natural unity of the day you break the numerical equilibrium of things. Accord, on the contrary, forty-eight hours of repose after twelve consecutive days of labor, you kill the man by inertia, after having exhausted him by fatigue."

The need of the Sabbath is so clear and its importance so great that it has become a civil institution among the most enlightened states. It is a great mistake to suppose that our so-called Sabbath laws are only coincident with what men term Puritanic bigotry and intolerance. They are well-nigh coextensive and coeval with the Christian world. They began with the first Christian sovereign. The emperor Constantine, soon after his conversion, A.D. 321, decreed that there should be "rest on the venerable Sunday," and his example was followed with more specific enactments and prohibitions by subsequent Roman emperors, eastern and western, by Charlemagne, by kings of the Franks and the Saxons in the early and medieval times of Christian Europe, and still more frequently, and with more

minute requirements, by later European kings. In England and Scotland such statutes have existed from a very early period, modified somewhat in different reigns, and made more lax or more severe according to the changing tone of the times, but on the whole showing an increasing strictness and minuteness in their requirements. The laws of King Athelstan (tenth century) forbade all merchandising on the Lord's day under severe penalties. In Henry VI.'s reign (1448) the holding of fairs and markets on church-festival days and Sundays—except the four Sundays in harvest—was prohibited. In the reign of Elizabeth (1558) it was enacted that "all persons shall diligently and faithfully, having no lawful or reasonable excuse to be absent, endeavor to resort to their parish church or chapel upon every Sunday and other holy days, and then and there to abide orderly and soberly during the time of prayers, preaching, and other services of God." The law passed in the twenty-ninth year of Charles II.—anything, surely, but a Puritan king or a Puritan time—requires that "all persons whatsoever shall, on every Lord's day, apply themselves to the observation of the same, by exercising themselves thereon in the duties of piety and true religion, publicly and privately;" and that "no tradesman, artificer, workman, laborer, or other person whatsoever, shall do or exercise any worldly labor, business, or work of their ordinary callings upon the Lord's day, works of necessity and charity only excepted." The second section prohibits drovers, horse-couriers, wagoners, butchers, higgleries, and their servants, from travelling, and the use of boats, wherries, lighters, or barges, except on extraordinary occasions. By another section, persons are prohibited from serving or executing any process or warrant on the Lord's day, except in cases of treason, felony, and breach of the peace. Nearly a hundred years after this act was passed and not a hundred years ago, in the twenty-first year of George III.'s reign, it was enacted "that any house, room, or other place which shall be opened or used for public entertainments or amusement, or for publicly debating on any subject whatsoever, upon any part of the Lord's day called Sunday, and to which persons shall be admitted by the payment of money, or by tickets sold for money, shall be deemed a disorderly house or place; and the keeper of such

house, etc., shall forfeit the sum of £200 for every day that such house, etc., shall be opened and used as aforesaid on the Lord's day." The third section of this act provides "that any person advertising or causing to be advertised or publishing an advertisement of any public entertainment or amusement, or any public meeting for debating on any subject whatsoever on the Lord's day, to which persons are to be admitted by the payment of money or by tickets sold for money, shall forfeit £50 for every such offence." These laws are still upon the English statute-books, tho they have been supplemented, not relaxed, by acts passed in the reign of George IV. regulating inns, taverns, etc., on the Lord's day, by an act passed in the fourteenth year of William IV. whose preamble asserts it to be "the duty of the legislature to remove as much as possible impediments to the due observance of the Lord's day," and by an act in the thirteenth year of Victoria (1850) which repeals the exception in the statute of Henry VI., of four Sundays in harvest, thus making all fairs on Sunday illegal.

These Sunday laws of Great Britain are embodied in a greater or less degree in the Sunday laws of this country, every State in the United States with the exception of Louisiana, and every territory with the exception of Arizona, Utah, and the Indian Territory, having deemed it wise to enact something of the same. The usual course of legislation in each State or Territory has been to enact some general law modelled on the English statutes or on that of some other State, and when subsequent acts have been passed the law has generally been rendered more strict.

But notwithstanding this general conviction respecting the wisdom and beneficence of the Sabbath, and these increasing appliances among the most enlightened nations for its better observance, we are to-day mourning over what seems to be its increasing desecration. This, however, ought not to surprise us. It only represents a universal tendency among men. Singular as it may seem, the fact is clear that human nature is far more active in throwing away its privileges than in preserving them. Arts and literatures and social refinements have been discarded by those who professed them far more frequently than they have been retained. If we look at the actual facts

unblinded by any theory which prejudges them, we fail to find any inherent law of progress to a better state in human nature. On the other hand, the truth revealed is that of an inherent law of deterioration. Civilized nations have often become savages when left to themselves; savages left to themselves have never become civilized. Upward impulses, with man as with nature, come first from above. Nature does not improve itself, but all its culture comes from men who have themselves been cultivated. The desert or the wilderness left to itself, or left to the savage, remains a desert or a wilderness still; while in the presence of the cultivated man surrounding nature takes on the type of his culture, the desolations of the desert rejoice, and the wilderness buds and blossoms as the rose. But let the human skill which has converted the waste into a garden be discontinued and the garden becomes a waste again. We can trace the process by which the golden and luscious pippin has been brought out of the brown and bitter crab, but it is only by man's skilful grafting, planting, and pruning that this result has been secured, and not by any spontaneous process through which the coarser stock has evolved itself into the finer one. So of all our cultivated flowers and fruits; they have been gained by arts of man and not by any original and unaided tendencies of nature, and if the skill which has produced them should cease its care, they themselves would cease and only the wild and worthless originals would remain. In like manner, man finds all his improvement in a divine incentive and not in any impulse original to himself. A divine gift and not any human creation is the source of all human progress, and when men have renounced this gift and sought to go forward by their own appliances the invariable result has been that these appliances have become more and more inapt, and the efforts to employ them have become more and more feeble, until progress has ceased and the means of progress have been lost altogether.

We shall not, therefore, counteract the downward tendencies of human nature by seeking to stem them through barriers which human nature itself can provide. We shall not stop the increasing desecration of the Sabbath by demonstrating its folly through any increasing disclosure of the advantages of this sacred day. Nothing is easier nor more common than to have

the understanding convinced of the better course while the man actually chooses and follows the worse. In the practical conduct of life men are not governed by their understandings but by their sentiments, and if we shall ever exercise a living power over men it can only be by influences which reach the fountain of their sentiments, their heart, their will.

Can we gain such a power by appealing to the sentiment of duty? Can we, in the case in hand, secure the desired regard for the Sabbath by arousing the conscience to see and feel that such a regard is not only advantageous but right and obligatory? Doubtless the sentiment of duty has shown a mighty power in human life. What revolutions in character, what wonders in life it seems to have achieved! And yet with the great majority of men, to-day or at any time, the sentiment of duty seems utterly powerless. Does it control men generally, or has it ever done so? Some men doubtless seem to do the right by the simple constraint of obligation. They seem to be kept from doing wrong simply because it is wrong; but is this true? has it ever been true since the fall of the great mass of mankind? Nothing is more plain than that vice and crime of any sort run riot with human life in defiance of the most undoubted sense of obligation.

The morality taught by Socrates, by Zoroaster, by Confucius, by Shakya-Muni, was in many respects of unblemished purity and was proclaimed with unsurpassed power; but it did not change men; it did not raise the people to whom it was taught; it did not prevent them from sinking to a lower and lower depth of degradation. In no nation in the world is the virtue of truthfulness taught more earnestly or more prominently than in the schools of China to-day, yet in no nation is duplicity more evidently the rule of life. Says Dr. Wells Williams in his "Middle Kingdom" (vol. ii. p. 96): "There is nothing which tries one so much when living among the Chinese as their disregard of truth. Their proneness to this fault is one of the greatest obstacles to their permanent improvement as a people, while it constantly disheartens those who are trying to teach them." Unless we can add to the constraint of a moral principle the command also of a moral sovereign, no

appeal to the sentiment of duty and no awakening of that sentiment will ever make it actually dominant over men.

Morality does not save men. It has never saved them. It has no power to produce any correspondence to itself in human life. I do not enter here at all upon the question whether there have ever been individual instances of men who have changed from vice to virtue by moral precept alone; leaving that question to be answered as it may, this much at least is evident, and is all I here desire to urge, that the preaching of morality, however clear, however vigorous, has always proved a failure so far as the mass of men are concerned; it has never gone down deep into society and molded it internally and from the centre with a regenerating and vivifying power. Hence, I argue, we shall not succeed in securing the desired observance of the Sabbath if we only add to the evidence of its obvious advantages, the evidence also of its equally obvious moral obligations. Men are just as likely in the present and will be just as likely in the future to turn their backs upon both these evidences as they have been in the past.

Religion is the only potency which has ever shown itself adequate to improve men. The preaching of God's Word and of God's Will has renovated human hearts, and renewed the face of society; it has succeeded when every other agency has failed; it is doing this in unnumbered instances at the present day; and if we study either the facts of human nature or of history, we are warranted to expect help and success in the future from this and from no other source. Let us, therefore, light our torches at the sun, and while we recognize the Sabbath as a civil institution full of wisdom and beneficence, and therefore to be asserted by all the authority of the state, and deduce it also as a moral obligation to be urged with all the force the conscience can bring, yet as civil institutions no more perpetuate than they produce themselves, and as the sense of moral obligation is awakened and kept alive only by some religious quickening, let us not forget that the Sabbath, in order to be widely diffused and permanent, must come clothed with the power and crowned with the authority of God's legislation. I think we shall find that the weakening of the hold of the Sabbath upon

men is just in proportion to the weakening of their conviction of its divine authority.

Is it true, then, that we have such a command, a universal and perpetual command, of God that we recognize and reverence this day?

Certainly such would seem to be the case at the first view. The command to "remember the Sabbath day and keep it holy" stands in a code of which all the rest has confessedly a universal and perpetual obligation. Like the other nine commandments, this was all written by the finger of God, and was with them the first direct proclamation of the God of Abraham, of Isaac, and of Jacob to his chosen people through whom all the families of the earth should be blessed. There is nothing in the form or the terms of this command which indicate any narrower application or more limited authority than belongs to the others with which it is associated. It constitutes with them the testimony—thus termed by God himself—or witness of the divine will. We call it one of the ten commandments, but it is noticeable that they are not thus termed in Scripture. There, whenever they are spoken of together, whether in the Old Testament or in the New, they are called the ten words, a distinction quite remarkable. The word of God, the word of the Lord, expresses not simply a particular command, but rather announces the abiding source of all commands. The commands may often have only a local and temporary application, while the word of the Lord standeth forever. God himself, in his utterances to Moses, distinguishes between these words and the judgments or particular statutes which he commissions his servants to declare to his people. It is these ten words, and not the accompanying statutes, which are written by the finger of God on the tables of stone, and which are sacredly preserved in the ark, called the ark of the covenant because it bears the record of this testimony of God's righteous will, the announcement of which to his people is God's covenant with them. God's work in his kingdom of grace is thus analogous to his work in his kingdom of nature; the individual rests upon the species; the particular is upheld by the universal; the laws which are of local application, which belong to a time and a people, are first grounded on a law world-wide and eternal.

These considerations are not doubted, so far as I know, respecting any one of the so-called ten commandments, excepting the fourth. All the others are admitted to be of perpetual and universal obligation, but this, it is said, is Jewish and transitory ; all the others carry with them the evidence of their universality in their own statement, but this, it is said, is a positive institution whose ground is not seen by the natural conscience ; all the others have a substantial existence which neither the old dispensation could constitute nor the new change, but this is regarded as only the shadow of good things to come, the body of which is Christ. These views are held by many wise and excellent men, and demand our careful attention.

Certainly the reasons for refusing to one of these commandments the unlimited sway which confessedly belongs to all the rest should be so clear as to make it impossible either to mistake or to deny them. But this is far from being the case. When it is said that the Sabbath is only a Hebrew institution, it seems to be forgotten that the Hebrew Sabbath was not alone the Sabbath of the fourth commandment, but a particular and local Sabbath, based upon and representing the general provisions which the fourth commandment contains, but characterized by particular observances and enforced by special penalties, none of which are mentioned in, and all of which are independent of, the commandment itself. These particular observances, these special statutes and penalties, were doubtless wise for the Hebrews, for God enjoined them ; but they are not, therefore, wise for all men, and these might all disappear as a local and transient structure whose broad foundation stands unchanged and may be built upon forever. Whatever may be said, therefore, about the Hebrew Sabbath, whether it abides still for them or is done away for them and for all men, does not affect at all the question of the perpetual validity and obligation of the fourth commandment. Again, when it is said that the fourth commandment is not a universal and perpetual injunction, because the Sabbath is only a positive institution and contains no universal precept, we are led to inquire, What is a universal precept ? It is not necessary that it be universally acknowledged in order to be universally obligatory. It may be true and binding upon all men and yet only evidently true to some. It may

shine with a resplendent and self-revealing light, while there may be blurred or blinded eyes by whom it is not seen. The light shineth in darkness and the darkness comprehendeth it not; but this is not because the light is not light, but because the darkness is darkness. We must not say, therefore, that the fourth commandment contains no universal precept because we cannot see the ground on which the Sabbath rests, as we can see the ground for prohibiting murder, adultery, and theft. It is possible, to say the least, that to other intelligences the original basis of the Sabbath may be just as clear and just as self-evident, and therefore just as universal, as is the basis of chastity and honesty and truthfulness. A self-evident truth is not thereby instantaneously evident. All the truths of mathematics are self-evident, and yet they are not seen until the eye has been opened and taught to see. I do not suppose that a child in his earliest intelligence recognizes the obligations of the fifth commandment any more than some men recognize those of the fourth; but the obligations are there whether the child recognizes them or not, and would be there whether the commandment should announce them or not. I think it is quite possible that there may be many persons in the world, very ignorant persons doubtless, but yet persons who have never thought of the obligations of any of the ten commandments, and who would never think of them till they were taught and trained. Now if it be really better for mankind, as wise men unitedly affirm, that the daily routine of human toil should be interrupted by periods of rest from labor; if it be wise that the body have special times to rest from labor, and the spirit special times to give itself to worship, then a certain length and frequency of such periods is better than another; there is a wise division of such seasons, which to a vision sufficiently broad and clear must be just as evident and just as necessary as is the eternal requisition, "Thou shalt have no other gods before me." The distinction between a positive institution and a moral precept, as tho the one was grounded on an arbitrary enactment and the other rested on absolute righteousness, cannot in the least be maintained in reference to anything which God has enjoined. He does nothing arbitrarily. All his ways are perfect. He sees the eternal and unchanging reason for them all, and could his

subjects come to see his statutes in the light in which he must ever behold them, the distinctions which they now make between a law whose reason is apparent and a law whose reason is hid in the will of the Law-giver would forever disappear.

But it is surprising to me that the reason for the fourth commandment, the reason clearly stated in the commandment itself, is so greatly ignored, or at least is brought forward with so little prominence in the discussion of the Sabbath question: "For in six days the Lord made heaven and earth, the sea and all that in them is, and rested the seventh day." Here is a reason divinely announced for the divine injunction, "Remember the Sabbath day to keep it holy;" and if we only note this reason until we see its divine and glorious significance, I think we can never after doubt the universality or the perpetuity of the injunction to which it is attached. What does it mean, then, when it says God rested from his work, and therefore commanded man to rest? Man becomes weary from his labor and needs rest for his refreshment; but surely this is not true of God. He has wasted no power in his work which he needs rest to restore; and while man may find his rest a recreation from which he rises with new energy to his work, and while this may make it wise, must make it wise, for him to have his stated times for rest, this is only incidental and does not reach at all the high significance of the reason which requires him to rest because God rests. God rests because he is a spirit, and as a spirit finds completeness in his work. Nature never rests; nature never is complete. From day to night, from night to day, swifter than a weaver's shuttle, bringing life to death and death to life again, nature never finds a beginning which is not an end, nor an end which is not a beginning. "One generation passeth away and another generation cometh; the sun also ariseth and the sun goeth down, and hasteth to the place where he arose. The wind goeth toward the south, and turneth about unto the north; it whirleth about continually, and the wind returneth again according to his circuits." "Is there anything whereof it may be said, See, this is new?" Such is the ever-recurring question of nature, to which the ever-recurring answer of nature must be: "The thing that hath been it is that which shall be, and that which is done is that which shall be done, and

there is no new thing under the sun." But the answer of the supernatural, of the spiritual, is: "Behold, I make all things new." The spiritual originates and consummates, begins and finishes its work. And it is the announcement of himself as spiritual and supernatural when the Creator of the heavens and the earth beholds his work that it is good, and rests in the completeness of what he has done; rests not because he is weary, but because his work is worthy of him and needs no further repetition. There is thus something sublime in the primeval record: "Thus the heavens and the earth were finished and all the host of them. And on the seventh day God ended his work which he had made, and he rested on the seventh day from all his work which he had made. And God blessed the seventh day and sanctified it, because that in it he had rested from all his work which God created and made." And therefore it is meet that man made in the image of God should remember the Sabbath day to keep it holy, should perpetually hallow and sanctify the day whose announcement is God's witness to himself as spiritual and supernatural, and whose keeping is man's witness that he is supernatural and spiritual too. That the Sabbath is a day of rest from bodily labor, wherein man on his natural side finds rest and refreshment, is abundantly true; but this is only incidental, is but the means whereby man rises to his true spirituality and rejoices in communion with the Father of spirits. This is the reason for the Sabbath, and the law remains while the reason remains. Instead of the fourth commandment announcing what is sometimes called a merely positive institution arbitrarily enjoined, the true view shows us in this commandment the very ground on which the application of all the others rests. The commandments are not given to nature, but only to spirit. They have no significance save to the free will, and it is only in this fourth commandment that the free will implied in all the rest is explicitly declared, the free will of Him who made the heavens and the earth and in whose image man was made.

We learn from the record that the Sabbath was observed by the children of Israel before the ten commandments were given. "To-morrow," says Moses (Ex. xvi. 23), "is the rest of the holy Sabbath unto the Lord;" and again (verse 26), "The seventh

day is the Sabbath;" and once more (verse 29), "The Lord hath given you the Sabbath;" and still further (verse 30), "So the people rested on the seventh day." It is certainly remarkable that this is the only matter in the ten commandments which Moses lays before the children of Israel before the ten commandments were given; but this is not strange if the fourth commandment contains, as I think it does, the reason which justifies all the rest. The Sabbath thus is not a new institution commanded from Mount Sinai, but one already known which they are solemnly enjoined to remember. If the act of remembrance points backward to the beginnings of the human generations, the command to remember points as truly forward to their end.

I think we are warranted to say from all this that the fourth commandment is at least as universal in its obligations as any of the ten, and that while there was a Jewish law of the Sabbath which was local and which has passed away, this was wholly accessory to the fourth commandment and dependent thereupon, while the fourth commandment is as independent of it as are the second and fifth and sixth and seventh and eighth and ninth commandments independent of the particular Jewish laws against idolatry and disobedience to parents and murder and adultery and theft and false-witness.

Is there now anything in the New Testament which would set this doctrine of the Old Testament respecting the Sabbath in any different light? In the Old Testament representation the Sabbath appears as a blessing. The rest from labor which it enjoined was a privilege which all were to enjoy. "In it thou shalt not do any work," etc. This not only was a privilege, but was recognized as such by the early keepers of the Sabbath, and is now recognized as such by all who carefully contemplate it, even by those who look no farther than its physical and natural relations. It would be strange, therefore, if the new dispensation with its larger blessings were to abridge or do away with any of the blessings of the old.

In studying the New Testament, it is quite evident that the true doctrine of the Sabbath was exceedingly important in our Lord's eyes, as we see from the prominence with which he brings it forward both in his works and his words. I need not note the

points, sufficiently familiar, which illustrate this. But in them all two truths stand out with great distinctness, and which together constitute Christ's full teaching in this matter. The first is that the Jewish attachments to the Sabbath were largely corruptions and perversions, which not only might be disregarded but which should be set aside; and the second is that the Sabbath itself is quite distinct from Jewish observances, and has a ground and meaning quite independent of these. When he says, "The Sabbath was made (*i.e.*, became) for man," I do not see how we can avoid the conclusion that he is here looking at a universal fitness of the Sabbath for a universal human need; and when he says, in justification of his work of healing done upon the Sabbath day, "My Father worketh hitherto, and I work," it seems equally clear that he is here placing the Sabbath again upon its original grounds in God's work, which, complete as creation, continues also as a preserving energy, which is at the same time complete. Because the Sabbath is made for man, the Son of man, he in whom manhood is truly reproduced, the Divine Man is Lord of the Sabbath day, whose utterances respecting it admit of no appeal, and must be for all men. The more one ponders on the prominence of the Sabbath in the teachings and the life of Christ, and the more one penetrates to the meaning of this institution as illustrated by Christ's words and his example, the greater, I think, must be his sense both of its importance and its universality. Christ's teachings here as elsewhere come before us in large outline. They suggest rules rather than announce them. But their suggestions are seeds which in a good soil will bear their fruit after their kind, and in a healthy soul will formulate themselves in rules for the practical observance of the day, indicative both of its sacredness and its beneficence.

As we pass from the Gospels to the Epistles, from the teachings of Christ to those of the apostles, we are struck with the brevity and the obscurity of all allusions here to the Sabbath. The apostles speak of it in few words, and these not clear. In the Epistle to the Hebrews we find it distinctly asserted that there remains a Sabbathizing for the people of God, but whether this Sabbathizing which remains in the Christian dispensation after the Jewish dispensation has passed away is something to

be enjoyed upon earth or only in heaven, is a matter of dispute among excellent interpreters of the Bible. In the Epistle to the Colossians it is said, "Let no man judge you in meat or in drink, or in respect of a holy day, or of the new moon, or of the Sabbath days, which are a shadow of things to come; but the body is of Christ." But whether the Sabbath days here mean the weekly Sabbaths or the annual religious festivals of the Jews, to which the term Sabbaths was often undoubtedly applied, is a question to which different students of the Bible of perhaps equal piety and learning have given different answers. In the Epistle to the Romans Paul says: "One man esteemeth one day above another; another esteemeth every day alike. Let every man be fully persuaded in his own mind." But whether Paul here refers at all to the Sabbath day, or whether, if he does, he means to give any rule respecting its observance, is not clear.

Equally scanty is the evidence respecting the views of the early church about the Sabbath in the two or three centuries succeeding the New Testament times. So far as we can discover from the monuments still remaining, the doctrine of the Sabbath entered very little into the teachings of those times. The early fathers make as little mention of it as the apostles themselves; and from anything which they say in all their writings we could hardly argue either that they did or that they did not regard the observance of the Sabbath as obligatory upon them. Some have inferred from this that the Sabbath was so evidently abrogated in the Christian dispensation that there was no occasion for mentioning it in the early church; but then why should our Lord himself refer to it so often and so prominently, and why should he so clearly, while freeing the day from Jewish admixtures, set it before us in its universal human significance? This silence of the apostles and the fathers can be more easily explained on other grounds. In Christ's own teachings—more valuable, more suggestive, more significant by far than had they been formulated into definite rules of action—there was quite enough to furnish rules when the time for their announcement should come; but that time was not in the apostolical and early Christian age. Rules for the observance of the Sabbath have large relations to society. It is impossible

that they should be enforced in opposition to dominant social and civil influences. To a servant of a pagan master, to a child of pagan parents, work upon the seventh day might be as necessary as work upon any other: regular rest upon that day would doubtless be impossible; and thus, however desirable a Sabbath might be for them and for all, they would need to wait for its complete enjoyment, as the world waited for the Messiah himself, till the fulness of the time should come. But as the world was prepared for the coming of the Messiah before he came, so there were antecedent steps which we can hardly look upon as other than preparatory for the establishment of the Christian Sabbath as a definitely recognized institution of the Christian world. I think it must seem to every one quite significant in this respect, that it was very nearly the beginning of the Christian era—not before that time, and not later than the second century—that the division of time into weeks had come to be the common usage both among the Greeks and the Romans. It is also quite clear, both from the apostles' writings and those of the early fathers, that the Lord's day was recognized as a day of special joy and rest and worship. "Even business is to be put off upon this day," says Tertullian, "lest we give place to the devil." There is no doubt, moreover, that both the seventh day and the first day of the week were both observed with special sacredness for a considerable period in the early church; the observance of the seventh day, so far as we can learn, tho the evidence is obscure, gradually lessening and the observance of the first day growing in prominence, until Constantine's famous edict only gave a formal expression and a governmental sanction to a usage already established in the thoughts and the customs of the Christian world. It was the Lord of the Sabbath day who had given with his parting command and benediction his parting promise also to his disciples, "Lo, I am with you alway, even unto the end of the world;" and who can doubt that it was in the fulfilment of this word that the ongoing of history and the sentiments of the church were ordered so that the Sabbath, having become the Lord's day, should enthroned itself in the perpetual affection and reverence of the Lord's people?

It is sometimes said that as in the gospel dispensation we

are not under law but under grace, therefore the law can no more be obligatory upon us, and that it is to forget the liberty wherewith Christ maketh us free and be entangled again with the yoke of bondage when we insist upon commandments as rules of life. Our actions should be prompted, it is said, by the inner behest of the spirit, and to be controlled by laws and commandments is to fall from grace. There is a certain truth in this, enough to make it plausible and give it currency with some minds, but there is also a certain ignoring of the truth. To those who are under the Gospel, in whom its spirit lives, the law has become translated into a life, its external obligation has become an inner inspiration; but are its obligations thereby relaxed? has it thereby any the less constraint? Is the law against theft any the less a law or any the less obligatory where people are perfectly honest through an inner inspiration than where they are only kept from theft by the shere force of the law? The law has become translated into a life, but has it lost its authority in the process? Nay, has it not rather gained in authority, as the command of a father grows in its constraining force in exact proportion to the growing love and reverence of his child? I think we fall into a very serious error when we argue that the law of commandments has lost its force in the Gospel. "Stand fast," says Paul, "in the liberty wherewith Christ hath made us free;" but we are not to forget that liberty is not a disregard of law, but an obedience to the law; the bondage has become changed to freedom not by a change of the law, but by the changed motive for obedience to the law. The law is truth, and it cannot, therefore, be set aside; the law is right, and it must, therefore, be always obligatory. There is the same law in the old dispensation and the new, and precisely the same obedience thereto is required in both. The difference is that through the new motive now brought in the obedience which failed before is now secured. This is precisely as Paul argues in the Epistle to the Romans: "For what the law could not do in that it was weak through the flesh, God sending his own Son in the likeness of sinful flesh condemned sin in the flesh, that the *righteousness* of the law might be fulfilled in us who walk not after the flesh but after the spirit." The law requiring righteousness is not relaxed, but is rather intensi-

fied in the Gospel, as argues the author of the Epistle to the Hebrews: "For if the word spoken by angels [*i.e.*, the law given from Mount Sinai] was steadfast, and every transgression and disobedience received its just recompense of reward, how shall we escape if we neglect so great salvation, which at the first began to be spoken by the Lord?" "I came not to destroy the law," said He who was both Lord and Christ, "I came not to destroy, but to fulfil." The love to the Law-giver with which the grace of God in the Gospel inspires us, and which transforms the commandments of God into divine benedictions, leads the soul to a loyal devotion whose depth and breadth and intensity elevate and glorify as not before, the authority of the law. "Do we then make void the law through faith? God forbid; yea, we establish the law." We must come back, therefore, to the original ground of the Sabbath; and here the presentation of its claims may rest—as a divine institution, made for man, made because the unmade Wisdom saw its fitness for man's need, made as a witness that the Creator of the heavens and the earth is a spirit, and made for man as a testimony also to his own spirituality. The law remains while the reason remains.

JULIUS H. SEELYE.

AGNOSTICISM IN KANT.

I.—KANT *versus* HUME.

DAVID HUME was the philosophical father of modern Agnosticism. His sceptical conclusions are the natural fruit of a philosophical system as logical as it is subtle and ingenious. Hume was an empiricist holding uncompromisingly that all knowledge is derived from experience. This proposition seems harmless enough, for in a certain sense knowing and experiencing are the same thing. But when it grows more and more obvious, as we follow his exposition, that Hume is bent on evolving not merely knowledge but the faculties of knowledge from empirical elements, we begin to hesitate. For while we may persuade ourselves that it makes little difference practically how knowledge originates, since we know what we do know, "our home-bred fancies" rebel against the attempt to derive our faculties of knowing from experience; and the revolt grows deeper when examination has led to the discovery that experience means in Hume's nomenclature not that body of consciousness which we are wont to designate by that term, but simply the impressions of sense as they come to us without organization or relation. Impressions are the sole originals from which spring the individual himself as well as his mental history. Hume's Sensationalism goes to the root of the matter, and it is simplicity itself.

Beginning with the elements and following his clear exposition, we learn that impressions of sense, which must not be mistaken for perceived things, impress copies of themselves on the sensuous organism as a seal makes its impression on the soft wax, and thus arises a second class of psychological elements. There are impressions of sense which have neither objective

basis nor relations among themselves, and the derived copies of these which Hume styles ideas. Our ideas, we are told, are simply copies of our impressions. Hume makes a clean cut between impressions of sense and ideas, and acknowledges the former alone as original.

Bearing this in mind, we may clearly apprehend the true character of Hume's sensationalism. His impressions are mere organic affections, and they have no relations except the mere external and accidental ones of coexistence and succession. We discover in the mind, however, not merely ideal copies of these impressions, but associating threads which first combine the isolated copies of impressions into ideas of objects and then associate these objects together in a system of nature.

The impression is the demiurge which fabricates the structure. This material architect employs two agencies in his operations: first, by *direct impact*, as of a seal on wax, he produces all ideas and such relations, as those of time, space, resemblance, which have no existence apart from the impressions and are therefore copies of them; and secondly, by *constant repetition* of the same orders among impressions certain *habits* of association are built up among their corresponding ideas, by virtue of which, when one member of the company presents himself to the mind, we look instinctively for the others to follow. These instinctive habits are Hume's equivalents for the faculties by which we cognize what we suppose to be the relations among things. And his aim is to show that these relations have no objective existence, but are simply subjective cohesion among ideas created by the constant recurrence of certain orders of contiguity among the impressions of sense.

Hume makes short work of ideas. They are images or phantasms of impressions. Take the ideas of space and time. It is Hume's doctrine that space and time are mere ideas. Space cannot, however, be derived from any impression. But it is a copy of the relative positions of a number of impressions or of the different points in one impression. It is thus an image or phantasm like the rest of our mental furniture. It is easy to see from this that space relations arise from viewing impressions under the idea of space. Hence externality collapses and the

testimony of our senses to an external world in space falls to the ground. In like manner the idea of time is derived from the succession of our ideas. Time relations are merely ideas and impressions cognized under the idea of time. Hence the testimony of consciousness to the existence of a self in time falls to the ground and the inner world breaks up into a multitude of mental states or ideas.

Thus with a few bold strokes Hume demolishes the external world of objects, leaving no substitute but a mass of organic affections, and the internal world of self, leaving nothing in its place but a moving panorama of phantasms. Primary cognition gives nothing but impressions and their ideal photographs.

But the higher mental processes are equally helpless. There are two bridges which seem to lead outside of impressions and ideas to objective realities. These are the relations of identity and causality. Hume styles them relations which cannot be referred to any impressions of which they are copies. It is incumbent on him, however, to show how they are derived from impressions, or in default of this to admit that they are genuine mental principles. *Identity* underlies memory and is the basis of the affirmation that the object called book is not a group of passing impressions but a permanent reality, the same object which we cognized as book yesterday. It is likewise the ground of the affirmation that the thinking self is no mere catena of fleeting phantasms, but the same self to which the phantasms were present yesterday. There cannot, it is plain, be any identity of impressions and ideas. If identity is a reality, it points to a permanent ground of impressions and ideas. But Hume labors to cut the nerve of identity by showing that it is all a mistake, and that what we *call identity* is merely the *close resemblance* of *impressions* and *ideas* which are in reality different. The group of impressions we call book to-day so closely resembles the group we called book yesterday that the mind slips unconsciously from one to the other, and in the end mistakes one for the other. This explanation, if valid, removes the necessity of presupposing any persistent object, and leaves the sentient individual shut up within the sphere of his own feelings. *Causality* leads us to infer a pin or some other

external ground of the sharp prick of pain which we feel in our organism. To admit the validity of this inference would establish the reality of external objects apart from impressions. But Hume's ingenuity is equal to the emergency. He seeks to break the force of this inference by referring the causal judgment to a Sensational origin. Identity, when analyzed, vanishes and leaves resemblance in its place. Causality collapses under Hume's analysis into mere sequence in time. Impressions follow one another in certain orders of time, and some of these orders never change. For example: two impressions, A-B, stand for lightning and thunder. These impressions always recur in the same order, the lightning preceding the thunder. Now, argues Hume, the constant repetition of the same order of impressions produces a cohesion between the phantasms of these impressions so strong that when the phantasm of lightning presents itself to the mind the phantasm of thunder necessarily follows. This *necessary cohesion* of ideas which makes it unavoidable when one comes up that the other should follow, Hume styles causality. Viewed apart from any particular antecedents and consequents, the causal judgment is, according to this explanation, merely an instinct or a subjective necessity of looking for the absent member of an invariable sequence when one member is present to the mind. It furnishes no grounds for inferring either a self or external objects, but points simply to an antecedent or consequent in the chain of impressions or ideas.

Hume thus aims to destroy all the principles which connect our mental states with an external or an internal substance, and to hedge us in with the wall of our own impressions. But the effect does not rest here. In reducing identity to resemblance, *memory*, which testifies to identity, loses its foundation and becomes a mendacious witness, being a mere habitual mistake, and the *reasoning faculty*, whose vital nerve is causality, when causality collapses into time sequence, loses its rationality and is forced to take its place as an instinct begotten by the invariable sequence of the impressions of sense. But the only equivalent for mind in Hume's philosophy is the sum total of these instincts, and it is, therefore, literally true that he derives both the mind and its knowledge from the impressions of sense.

Two conclusions spring naturally out of Hume's principles: First, that the cognitive powers cannot pierce the veil of sense. To cognize is to feel an impression. Whether there is any reality outside of the organism impressing it, the consistent Humian is unable to decide. Secondly, that the thinking faculties are affected by a similar inherent weakness. Thoughts are mere phantasms of impressions, and the thinking faculty is simply the associational links between phantasms, which have been forged by constant repetition of the same orders of impressions. Thinking is, therefore, having before us a more or less complex copy of the impressions of sense. Neither in thought nor in cognition can we pierce the sensuous veil in which we are enswathed. It follows that the realities in the midst of which we live and move and have our being lie beyond the limits of our vision, and mortals are doomed to move about perpetually "in a world unrealized." The theory that we can neither know nor even conceive realities existing outside of the sphere of sense is absolute Agnosticism. Hume is therefore the philosophical father of that doctrine in its most radical form.

Hume's suppression of both knowledge and faith roused Kant from his dogmatic slumbers and induced him to join issue with the sceptic. He saw that Hume's principles, if carried to their logical conclusion, would undermine all certitude, leaving science in as bad a dilemma as theology. Hence the aim of Kant's criticism is twofold: first, to establish a solid basis for *knowledge* within the province of sense; secondly, to discover a rational ground for *belief* in the reality of the supersensual.

The Sensationalism of Hume may be stated in two propositions: first, that the only original elements in knowledge are impressions of sense; secondly, that from these elements both the relations cognized and the faculties of knowing are derived. Kant does not admit either, but accepting Hume's doctrine that nothing but impressions can be given by the unaided senses, he proceeds to show that from them neither faculty nor relation can be derived.

But the dispute is not about experience as it is. Kant and Hume find the same elements in *matured* experience. The question at issue is not, what *is*, but what is *original*? Sensa-

tionalism makes sense the first principle of the intellectual life. But Kant, considering the constitution of knowledge and the relations of things, reaches a different conclusion. His analysis brings into clear relief a fact which Hume tried to ignore; namely, that knowledge contains elements which differ radically from the qualities of sense. The impressions of sense as such are relationless. They come trooping into the sensorium through the various avenues of sight, hearing, and touch, and within they form a heterogeneous multitude with no more coherence among themselves than stones on a highway. They give no account of themselves; they come without credentials. From them it is impossible to learn whether any more of their kind are to be expected or not. Lastly, they are limited in extent. The impressions which any individual organism can feel must cover a very small area in comparison to the whole scope of nature. The experience of the senses is confined to the individual, or, in Kant's terminology, it is subjective, forming a basis for individual assertions but not for general propositions. In short, experience derived from the senses is *relationless*; it is *contingent*, and it is *limited to the individual organism*.

From these considerations follow two conclusions in regard to Sensationalism which lie at the basis of the Kantian philosophy. First, the impressions being a disorganized multitude with no power to unite among themselves, the formation of an organized individual experience from them without introducing other agencies is impossible. All relation presupposes a common ground of relation among the things related, but impressions have no common ground. They are as independent as the monads of Leibnitz, while lacking the internal riches of the monads. Secondly, allowing that an individual experience may somehow arise out of impressions, it can never transcend the limits of a purely individual experience. The limit of consciousness is the feeling in the organism, and supposing sensation to be equal to the cognition of the rising of the sun in the east, the only affirmation that could be made on Sensational grounds would be the purely individual judgment, "I have an impression or a phantasm of the sun rising in the east." The generalized judgment, "The sun rises in the east," would have no validity, for in

it the individual would be going outside of his own impressions and affirming a fact as valid for all men.

Knowledge, however, is made up of general propositions. The particular affirmation, "This stone is heavy," states a fact, but it is of no use to the individual who affirms it or to any one else until it is freed from its individual limitations and stated in the general proposition, "Stones have weight." The body of knowledge is made up of such general propositions. Particular facts are simply the data from which they are derived. Sensationalism as above shown cannot go beyond the particular fact. How, then, are those general empirical propositions like the above, which constitute the body of scientific knowledge, possible? It is not true, as some have said, that Kant concedes the empirical judgments to Hume and bases his answer on such judgments as causality, which by virtue of their necessity transcend experience. He takes his stand at the fountain of knowledge and shows that Sensationalism cannot account for the general proposition in which all knowledge expresses itself. But Kant rests satisfied with no mere negations. After exposing the inadequacy of Hume's principles, he proceeds to develop a positive doctrine of his own. If the impressions of sense cannot produce knowledge, what additional elements must be presupposed as conditions of its possibility? A Natural Realist who holds that in sense-perception the mind cognizes objects and not mere impressions will see little utility in that part of Kant's philosophy which treats of the elements that enter into the constitution of objects. He will be disposed to look on this as misdirected ingenuity. But whether we agree with Hume and Kant or not that the senses begin with impressions out of which objects must be constructed before they can be cognized, we ought to have enough of candor and insight to acknowledge that, inasmuch as it devolves on Hume to build up a world of objects out of impressions, Kant's reasoning, which goes to show that simple impressions cannot form themselves into objects, has great force and utility as an *argumentum ad hominem*. Bearing this in mind, we will not lose our patience when we find Kant insisting that the impressions of sense are a pure multiplicity having no relations among themselves, and that the *combining* principles which group them together into objects must be

brought in from some source outside of the impressions. They cannot spring from impressions, and they are not identical with impressions. But without their offices to associate, for example, the impressions of sight and touch which constitute the object book, these elements would not come together and the group of impressions called book would not be formed. At the basis of our mental life, therefore, some other agents besides impressions of sense are needed, and those agents do not pertain to sense; that is, they are mental principles, co-ordinate and contemporaneous in their functions with the impressions of sense. Impressions are the materials, the mental principles the architects which work them up into the things and systems of things which we call nature. *Hume's impressions must become things before they can serve any purpose. But they cannot become things without the offices of mental principles. Therefore the Sensationalist must call in mental principles before he can take a single step.* This is Kant's reasoning, and whatever our philosophical creed we must admit its cogency.

But the objects of cognition are divisible into *things* and the *relations* among things. The relations which Hume classified accordingly as they could or could not be resolved into ideal copies of impressions are next considered by Kant. If impressions could not supply the synthetic principles which are necessary to combine them into objects, much less can they account for the relations among things. The synthetic principles and the relations from the lowest to the highest belong to the same intellectual system. Kant reviews these relations in his discussion of the categories. Keeping in view Hume's derivation and classification of relations we will not be at a loss for the motive that actuates Kant in his labor. He wishes to bring to the light and vindicate the intellectual basis of Knowledge. Knowledge he concedes cannot transcend the sphere of the senses. Impressions are a necessary element in the constitution of knowledge; for, as he contends, to know is to intuite, and to intuite means, in his nomenclature, the contact of an impression of sense with a mental principle. It follows that knowledge cannot outstrip actual or possible sensation. The general proposition on which knowledge rests is, therefore, an empirical proposition, the experience of the individual generalized and

made valid for all men. But to generalize and give objective validity to the experience of the individual is a task of which unaided sense is not capable. We have seen that impressions are wholly in the organism of the individual impressed. His ideas are copies of these. His affirmations spring from his ideas. Each individual, if Sensationalism is true, is a little isolated universe enclosing within its narrow walls all that the individual can know. His affirmations cannot reach beyond his own impressions. To this fact Kant applies the term *subjective*. If Hume's philosophy be true experience is strictly subjective, and from it each individual can affirm only that such and such facts are true *to him*, not that they are generally true to all men. But such affirmation is the negation of knowledge. The essence of knowledge is the affirmation of the *general validity* of facts for all men. This is what Kant means by objective validity, and he contends that while Hume cannot lift experience out of its subjectivity, knowledge transcends it by virtue of its objective validity. The affirmation of a general fact presupposes a general principle at its basis. The intuitionist meets the difficulty by affirming that the mind *perceives* things as existing external to and independent of its own cognitive act. For example, a tree is perceived to stand out external to us, and we affirm on this ground that what is objective to us will be objective to all other persons who bring their perceiving faculties into relation to it. In like manner the facts about trees, as for example that a tree is a vegetable, are perceived to be external in the same sense and hence objective.

But Kant is not an intuitionist. Mind in his view is a cogitating, comprehending principle which takes cognizance of matter that comes within its own sphere. But it cannot look outside of itself and contemplate things as external and independent. Conceding to Hume that experience begins with impressions, and is therefore subjective, as above explained, he shows first that experience cannot rise out of the pit of its own *subjectivity*, and then points to the fact that all the propositions which constitute knowledge are statements of *objective* facts. From this he argues that experience in Hume's sense is inadequate to produce knowledge. Experience is and of itself must continue subjective; but knowledge is objective, and by virtue of its ob-

jectivity transcends the power of experience. Hume assumed one class of original elements, the impressions of sense, as adequate to account for knowledge, but Kant's analysis shows the incompetency of the impressions and the necessity of assuming another class of original elements as grounds of its possibility. The first call for these elements was in the constitution of things out of impressions, and now we have a second call for their services in deriving general statements possessing objective validity from our subjective experience. Knowledge presupposes, as the condition of its objective validity, the agency of those self-same mental principles which Hume strives so hard to evolve from experience.

But Kant's vindication has a third and more important stage in which he lays hold of the iron clue of necessity and from it develops the distinctive feature of his philosophy. He meets Hume's doctrine that all knowledge is empirical in its origin and therefore limited and contingent with the fact that necessary judgments lie at the basis of all knowledge and enter into its constitution. At the basis of Mathematics are the axioms, at the basis of Physics the necessary affirmations of identity and causality. That a straight line is the shortest distance between two points, or that two straight lines cannot enclose a space, are facts which we see at once to be universally true. We affirm them immediately and unconditionally on bare inspection without any mediate or discursive process. Now, assuming that the experience of the senses can give rise to general empirical propositions, which Kant denies, the characteristic of all such propositions is that we know them to be absolutely true only so far as they have been *observed* to be true. Beyond the limits of observation there is a possibility of failure, and the recognition of this possibility is the element which makes all propositions founded on generalizations from experience contingent. The ground of them is limited, hence they cannot be affirmed with full certainty to be universally true. Hume's recognition of this fact led him to deny the existence of universals and strive pertinaciously to drive necessity out of the field of knowledge. The mathematical axioms, he contends, tho possessing a high degree of certainty, are yet derived from observation and are contingent. Kant points to the fact that

certitude is reached in mathematics at a single bound, and that, notwithstanding Hume's denial, its axioms are universally true and recognized to be so on bare inspection. He meets Hume's attempt to undermine the higher rational judgments of which causality may be taken as the best example, by similar reasoning. Causality is a fact which, like the truths of mathematics, we recognize to be universally true. Altho our experience is limited, we yet affirm the impossibility of a single exception to the causal rule anywhere in the universe. Hume contends that the necessity of the causal judgment is a subjective inability to break the association which the constant recurrence of the same order of impressions has wrought between their ideal copies. But Kant shows that the limitedness of experience makes it incompetent, tho ever so uniform, to produce such an association. Men are not hoodwinked by their experience, but clearly recognize its limitations; and were causality an empirical fact, it is not supposable that they would be wholly blind to that circumstance. Even instinct is not addicted to lying, but generally corresponds to some objective reality. The causal judgment is an intellectual judgment. *The recognition of the contingency of empirical judgments is the result not of the limited extent of experience, but of the intellectual apprehension of that fact.* If the causal judgment rested for its authority on empirical evidence, the intellectual apprehension of that fact would destroy its certainty, and men would come to regard it as not absolutely certain that every change has a cause. Such a result would, however, amount to a virtual suppression of knowledge. Knowledge must rest on certitude. At the basis of all science must be truths which are wholly beyond dispute. The possibility of science depends on the existence of necessary truths. Kant vindicates knowledge by discovering at its basis truths which are seen to be universally true; and he vindicates the faculties by the conclusion that inevitably follows. *If these universal truths can neither be derived from the experience of the senses nor recognized by faculties of sense, the powers which cognize and affirm their existence must transcend the province of sense with respect both to their nature and origin.* The categorical judgments, as Kant styles the affirmations of necessary truths, presuppose mental or spiritual principles as their

source; and these spiritual principles are identical with the synthetic powers which combine impressions into things, and with the agents which transform the facts of subjective individual experience into objectively valid truths. Kant thus establishes for scientific knowledge within the sphere of sense a solid basis, and at the same time lifts the mental faculties above the range of Hume's criticism.

II.—KANT THE AGNOSTIC.

There is a distinction between Agnosticism and Scepticism. Agnosticism denies knowledge, Scepticism denies belief. The agnostic who asserts the impossibility of a knowledge of supersensual objects may acknowledge valid grounds for a belief in them. But the sceptic, if thoroughgoing as Hume was, will not concede standing ground to either knowledge or belief. Kant was an agnostic but no sceptic. His philosophy, while it fails to discover any basis for a *science* of the supersensual, does find a granite rock for the feet of rational faith. The candid critic of Kant who may feel called upon to expose the philosophical grounds of his agnosticism will not be slow to exonerate him from the charge of scepticism.

We have seen how Kant meets and destroys Sensationalism upon its own ground. If Kantism is true, Sensationalism is false; for the essence of Kantism is its vindication of the supersensual elements in knowledge. By analysis he discovers in knowledge facts which cannot be referred to or derived from sense. They must, therefore, be attributed to sources which transcend sense. Consequently there are lying at the basis of knowledge and entering into its original constitution certain supersensual or transcendental principles which considered as a whole are what is generally conceived to be mind or spirit. So far, then, as these principles operate we are supersensual. We pierce through the veil of sense just as a lofty mountain thrusts its head through the sheet of cloud that limits the terrestrial view, and naturally we ought to be able to know supersensual objects and realities. Here, however, we come upon a root of bitterness the sources of which I shall seek to lay bare in the remainder of this article.

What can we know is not the most profound question in mental science. There is a deeper one: *How* do we know? The answer of Sensationalism to this question, if logically consistent with its principles, must be that there is no way discoverable by the human faculties by which anything can be known. Now the opposite pole of this logic of despair is the philosophy of intuition. Stripped of all its accidents and viewed in its essential quality, the distinctive attribute of Intuitionism is the doctrine that mind is a *perceiving* essence, meaning that it has power to look directly into the nature of things and apprehend them in their reality. In accordance with this doctrine, cognition is the apprehension of the real. And the intuitionist discovers by analyzing the full act of cognition that it is separable into two parts. There is the outlook of the mind through the senses, perceiving objects, and the inlooking of it through consciousness, perceiving self. Hence there are two sources of intuitive knowledge, Sense-perception, to borrow Scottish terms, and Self-consciousness. With these two eyes we cognize objects as real things and ourselves as spirit. And upon the two classes of intuitions the intuitionist builds two general sciences; namely, upon the data of Self-perception a science of nature, and upon the data of Self-consciousness a science of mind or spirit.

Kant recognizes spiritual functions in knowledge, but he is no intuitionist. Mind can perceive neither self nor objective realities. It is true that Kant uses a term *anschauung* which is rendered *intuition* in English translations of his works. But his meaning is widely different from the English sense of intuition. In his theory mind does not primarily contemplate things but impressions. These impressions come in through the various sensuous inlets, and not till they have presented themselves within does mind have anything to do with them. But coming into contact with mind inside and being relationless, whereas mind is the source and principle of relation, the manner of the contact is the coming of the impressions into certain space and time relations to one another. They enter a confused multitude, but the first contact of mind clothes them with space and time relations and holds them out as objects of sense. Now, this contact between the impressions

and the mental principles, together with the metamorphosis that accompanies it, is the full fact which Kant denominates intuition. It is so denominated because it embraces the only direct contact that occurs between mind and the matter of sense. The cognitive process goes on to clothe these objects of sense with intellectual relations and arranges them into a system of nature. But after the first act in which the impressions become objects by virtue of being clothed with space and time relations, the mind is dealing directly with a composite thing which is one remove from the simple impressions of sense. Intuition, therefore, in the Kantian sense does not imply a *perceiving* mind. It implies merely a receiver and organizer whose power of comprehending is coextensive with its organizing function. But it can go no further. The impression is a barrier which it can neither penetrate nor transcend. With respect to the impression and what lies behind it in the external and internal worlds the mind is an agnostic.

At the basis of Kant's agnosticism we may lay this doctrine of his that mind is not perceptive. For if it cannot *perceive* things as they exist apart from itself, it must *receive* impressions and construct phenomenal things out of the elements of sense. It follows that the senses are the only inlets through which the raw material of things can be obtained, and hence Kant's doctrine that knowledge cannot transcend actual or possible intuition. The logical outcome is a theory which presupposes supersensual functions as conditions of knowledge, but denies that we can know anything outside of the sphere of sense. Non-empirical principles enter into the constitution of knowledge, but knowledge is circumscribed by the limits of experience.

Kant's theory of knowledge is adequate as long as the senses are competent guides. What is needed for ordinary experience is general rules on which we can rely. Such rules are possible, provided we have adequate grounds for positing *our* experience as valid for men in general. Kant discovers the grounds of such validity not in a fixed and uniform external order of things, but in common principles of cognition. In the Kantian world there is no fixed external object called spade which all men must perceive as a spade and nothing else. There is merely a mass of impressions, and were there no common conditions of

cognition in the mind one man might see a pair of tongs where another would see a spade. But if the conditions of cognition are so fixed and uniform that the mass of impressions constituted spade by one must be so constituted by all, there is a basis of objective validity and general rules become possible. A blind beggar standing at a street corner feels something pressing against his palm ; he closes his fingers over it and discovers it to be round and hard. He examines it more carefully and makes out certain raised characters on its surface. At the conclusion of his examination he asserts that it is a shilling. In his affirmation he assumes the objective validity of his conclusion for mankind in general. But empirical knowledge can proceed a step farther. It can give general laws as well as general facts. The fact that in a certain position he has received a definite group of impressions creates in the mind of the blind beggar a faint expectation that if he takes the same position he will receive a similar group of impressions. By repeated experiments this expectation will be either strengthened or destroyed. If it is uniformly gratified, it will at length ripen into certainty and may be formulated as a law of experience. In this manner the laws of nature are constituted. They are merely inferences drawn from uniform experience. And they derive all their authority as bases of expectation for the future from their character as *analogies of experience*. These analogies of experience reach, according to the empiricist, the outside boundaries of the knowable. Kant and Hume are at one on the subject of the limits of knowledge. Both limit cognition to the sphere of sense. Both limit the validity of the reasoning faculties to inferences drawn from the data of cognition. But the senses give impressions merely, and these constitute an impenetrable veil, hiding from both the cognitive and inferential faculties the realities which lie outside. Both are phenomenlists, not realists. The vital difference between them lies, as I have shown, in the fact that Hume derives both knowledge and the faculties of knowledge from the impressions of sense, whereas Kant's analysis leads him to presuppose supersensual powers as conditions of the possibility of knowledge.

From which it will appear that altho mind is not perceptive, and cannot, therefore, pierce into the heart of things and appre-

hend realities, it is yet competent to give general rules for the guidance of men within the sphere of sense. Such is Kant's conclusion. *What he styles knowledge is not the apprehension of that which is in itself true, but of a rule which is objectively valid for all men as far as the experience of the senses extends.* The human mind might rest satisfied with this were it, as Hume affirms, a mere product of sense. It would then either be unable to conceive anything beyond the limits of sense, or would instinctively recognize all thoughts of the supersensual as false and vain. But our minds are not so fortunately or unfortunately constituted. Even when we deny the possibility of knowledge we cannot keep down the suspicion that our most vital interests lie in the region of the supersensual, and that there are truths in the nature of things which it deeply concerns us to know.

Kant's limitation of what he styles knowledge to the sphere of sense is absolute. But it does not follow that our mental powers are so circumscribed. To constitute knowledge they must receive the impressions of sense. But their function is the same whether they come into contact with matter of sense or not. The *rationale* of this is plain enough. The function of mind in the cognition of particular objects is, according to Kant, to furnish the concept-form of the objects. We cognize an object called chair. The function of sense in this cognition is to furnish a congeries of impressions. Mind applies to these impressions the *concept-form* of the object, and the result is the cognition of a chair. But impressions do not simply take their places in the concept-form of an object. This object is further cognized as belonging to a system of things called nature. This implies an additional mental function. The first act is the application of the concept-form to impressions in order to constitute objects. The second act is the application of the *relation-forms* to objects in order to constitute systems of things. Lastly, these *relation-forms* may, as *inference-forms*, go beyond immediate cognition and anticipate objects which have not as yet been given in intuition. In all this process, however, the mental function is perfectly distinct from that sense. It depends on sense for the materials out of which objects and systems of objects are constituted. But the possibility of its

action is independent of sense. It acts in accordance with its own nature. Its business is to form conceptions and ideas. And since this function is independent of sense, which is the limiting element in knowledge, it is *practically infinite* in its scope. It may drop its analogical character and may form conceptions of supersensual objects. It may dare even to form an idea of an infinitely perfect Being called God. Here Kant's spiritualism enables him to outstrip the Sensational-empiricist. The latter, deriving all mental functions from sensation, maintains that we cannot even in thought penetrate the veil of sense, and that our so-called ideas of transcendent objects are spurious. Kant acknowledges the legitimacy of these ideas. As conceptions they are as genuine as the conceptions of objects of sense, for they are formed in the same way. They arise from the completion of the mental process, and while not objectively valid they point out the true path of experience and set before the mind a goal of aspiration.

From the preceding, the philosophical grounds of Kant's denial of the possibility of supersensual knowledge may be readily apprehended. The mind naturally *thinks* on into the region of the supersensual, but its operations constitute knowledge only when it has impressions of sense to work with. The moment it passes the limits of sense impressions cease to present themselves, and the activity of the mind, instead of solid realities, creates nothing but empty conceptions. In the region beyond sense we can form ideas but cannot cognize objective realities. In the "Dialectic of Pure Reason" Kant examines the various grounds on which philosophers have endeavored to construct a science of the Supersensual. A spiritual science must rest primarily on a knowledge of the spirit that is in man. Kant acknowledges this, but is able to discover no basis for such knowledge. Mind is not perceptive; in the sphere of the object it finds, not things external to itself, but phenomenal things made by its own synthesis from the impressions of sense. If realities exist independently of the cognitive powers, they are by virtue of their independence unknowable. The theory that mind does not cognize things external to it but objects of its own construction may for convenience be termed phenomenology. The principles of Kant's phenomenology in

the sphere of sense-perception have been made, I trust, sufficiently clear. Rising into the province of *self-consciousness* we come into contact with his phenomenology of spirit. The intuitionist finds in self-consciousness the cognition of spiritual essence. We know ourselves by direct intuition, and upon these intuitions we build a Psychology, a science of the soul. But Kant's general doctrine that mind is not perceptive applies as well to self-consciousness as to sense-perception. In his analysis he distinguishes between what he styles the empirical and the rational consciousness. *The empirical consciousness is that inner feeling of self as affected which accompanies or rather forms a part of every mental act.* In an act of cognition, as Dr. McCosh explains it, we not only perceive a thing, but we perceive *self* as affected. In the act the self is cognized as a reality. But to Kant the self cognized in consciousness is as much a phenomenon as the object cognized through the senses. If we examine our mental operations we find that one class of them is composed of perceptions of objects in *space*, another of ideas or phantasms of these bound together in relations of *time*. In other words, we perceive objects and form mental images of them in the mind. These mental images come and go according to certain laws of association, and are constantly passing before us like pictures painted on the inner surface of a revolving sphere of which we are the motionless centre. This moving panorama of mental images is what Kant styles the empirical consciousness. And when we cognize an object in space, as for example a book, the feeling we have of being affected in time is simply the adjustment of the cognition to the mental image of book which has its own relations of time to other mental states. There is thus an outer and an inner stage to every cognitive act: the outer penetrated by a mental apprehension of an object as in *space*; the inner by an apprehension of a corresponding mental state or image as in *time*. The inner is composed of a multitude of mental images bound together in the order of time, just as the outer is composed of a multitude of impressions of sense bound together in the order of space. From this empirical consciousness, which lies wholly in the sensuous sphere, we must carefully distinguish what Kant styles the *rational consciousness*. Mental action is, according to Kant, the function of

mental principles. These are not one but many, corresponding to the different kinds of judgments affirmed by the mind. Each of these principles discharges its own function without dependence on any other. For example, the causal principle is the sole and independent source of the causal judgment. But at the root of every mental act is the conscious judgment, *I think*. How is that to be explained? Consciousness here expresses itself in its most primary form. It was seized on by Descartes as the starting-point of his philosophy. If there is a genuine act of self-knowledge, this is it. But Kant brings his critical method to bear on this affirmation, and reaches the conclusion that the consciousness involved in the predicate "think" is not a cognition or an intuition of self as essence, but a *consciousness of activity*. The mind or mental principle does not grasp itself in an act of intuition, but it *feels* its activity when it acts. Thus, while Kant recognizes this consciousness as the most fundamental and characteristic deliverance of the intellectual life, he declares it to be not an intuition of self but a feeling of activity. And since the mental act fails to cognize a real self, the "I" which is the subject of the affirmation cannot be known to be anything but a *conception of an ego* lying back of all mental action as the *logical condition of its unity*. Thus the highest principle of all knowledge, the self lying back of self-consciousness as its source, collapses under Kant's analysis into a mere *idea of unity*. The question whether self or spirit exists is left unsolved and unsolvable. Self-cognition is explained away as cognition of a phenomenal inner world composed of mental images, and rational self-consciousness shrinks into a feeling of activity, referring ultimately to a logical conception of unity. It is needless to follow Kant through the steps of his criticism of rational psychology. We have grasped his principle and can anticipate his conclusions. *Having no intuition of self to start from, a genuine knowledge of self is impossible and a science of the human spirit is left without foundation. And to attempt with the rationalists to argue syllogistically from the conception of self to its real existence, and hence to its freedom and immortality, is to attempt to build up a science without intuition, which is impossible.*

From self Kant passes over to the external world, or nature. He propounds to nature the question whether or not there are

valid grounds for affirming the existence of anything outside of the limits of sensuous intuition. The query is first put to the world of sense in space and time. The intuitionalist looks on space and time as external realities, and finding himself wholly unable to fix any limit to either, feels justified in affirming their infinitude. It is clear that the evidence of the infinitude of the world of sense must be drawn, if at all, from space and time. In Kant's philosophy, however, space and time are not *external* realities coming in with the impressions of sense, but they are mental functions. Mental principles do all the work except providing the raw materials or impressions. They constitute these as objects and weave the objects into the web of relations. One of their functions is *spacing* impressions and objects; that is, *clothing* them with *space* relations. In like manner they *time*, or clothe with time relations, the internal world of mental states and images. Space and time are not *external* realities, therefore, but mental functions wholly subjective in their scope and nature. The conclusion from this is obvious. The *room* for things which seemed to be boundless collapses, and we are shut in by the walls of a phenomenal world from which there is no outlet. The known world, therefore, extends as far as the senses of men have been able to penetrate, but no farther. The knowable world, so far as not yet experienced, lies within the possible reach of the senses. Now experience is a growing quantity, and will for aught we know to the contrary continue to increase indefinitely. Hence we can affirm of the world of sense that it is indefinitely extensible. But since experience must ever remain a *finite* term, we have no valid grounds for affirming the infinite extent or extensibility of the world of sense. We can no more assert a *possible* infinity than we can assert an *actual* infinite.

If, however, the world of senses provides no outlet to a super-sensual sphere beyond it, perhaps we can discover a door opening into this region from the world of the understanding. By the world of understanding Kant means those mental or spiritual principles whose presence in experience he so triumphantly maintains against Hume. From this point of view it is evident that the question, Does freedom exist, or Does natural law cover the whole scope of being? is simply another form of the question,

Have these spiritual principles objective validity outside of the sphere of sense, or are they objectively valid only within the phenomenal world? It is also clear that the question, Does a necessary being exist outside of the chain of phenomenal causation, or are all things contingent? is equivalent to the question, Does the mental principle of causality require us to go outside of the phenomenal for the First Cause of things, or does it oblige us merely to assume a phenomenal antecedent in the chain of natural causation for each phenomenal consequent? Here we touch the vital nerve which in Kant's philosophy connects cosmology with psychology. This world of understanding which "contains the foundation of the world of sense" is identical with the spiritual principles which together constitute mind. In the human soul they reach the stage of conscious activity, and here, if at all, they may be expected to take knowledge of their own essence and capacities. They prove themselves utterly incompetent to this task, however, and so, when we come upon them in nature, we find ourselves wholly unable to claim for them any objective validity apart from the world of sense. The world of understanding is objectively valid so long as it enters into the world of sense as the source of its organization and laws. But outside of the sphere of sense the principles of the understanding part company with the matter which furnished objects to their conceptions, and these henceforth are empty and objectively invalid. Consequently we can find no grounds for affirming either the existence of a world of freedom outside of sense or the necessity of a First Cause transcending the chain of natural causes.

Neither in *man* nor *nature* is Kant able to gain a foothold for a science of the supersensual. But his critique of theology is a natural outgrowth from his philosophy of man and nature. In man and nature as the source of their being, beneath them as their upholder and preserver and above them as their controller, we conceive an infinitely perfect Being called God. Now in his criticism Kant examines the rational evidence for the existence of such a being. This evidence may be summed up in three main arguments, one drawn from the mind of man, the remaining two from nature. From the human mind Kant draws what he styles the Ontological proof of God's existence. In this proof

we proceed from the conception of a Supreme Being in the mind to infer the existence of an object corresponding to the concept. Kant's objection to this proof may be restated in a sentence. It is the function of the mind to form concepts; but these concepts become cognitions only when some matter of sense is brought into contact with the concept. And without cognition there is no object. The concept is empty, and no object can be derived from it either by analysis or inference. Hence, altho we have the idea of God in our mind, yet being a mere idea, we have no warrant for arguing from it to the existence of a Being corresponding to it. Kant has denied that mind can furnish any starting-point for the supersensual except ideas, and from ideas no object can be inferred. The proofs from *nature* partake of the limitations of the source from which they are derived. Kant has reached the conclusion, *first*, that knowable nature is finite; *secondly*, that there are no grounds in nature for a science of the supernatural. In view of these conclusions it is obvious that an argument like that from cosmology which infers the existence of God from the existence of nature falls short of the mark. Nature is a finite effect and presupposes merely a finite cause. The argument from design falls short in the same manner. Design implies a designer, but the design in nature so far as nature reveals it is finite. It therefore implies merely a finite author. Now the Ontological proof gives the idea of an infinitely perfect being, but can reach no corresponding object. On the other hand, the proofs from nature give an object, but this object is finite. This result is the natural and inevitable consequence of Kant's fundamental principles. The thinking power of mind is unlimited and naturally culminates in an idea of a most perfect being. But knowledge cannot transcend sense. Hence the utmost object that can be known is but finite. There is an unbridged and unbridgeable chasm between the Ontological idea and the empirical proofs which renders them all inconclusive and leaves the existence of the divine spirit, like that of the human spirit, unknowable.

The outcome of Kant's speculative philosophy is the conclusion that a science of the supersensual is impossible, that the existence of a supernatural sphere and of objects that transcend sense is unknowable. This is frank agnosticism, and Kant per-

sists in it throughout all his philosophical writings. He might justly have been charged with scepticism had he rested in that state of well-balanced uncertainty which is the logical outcome of his speculative principles. But Kant is no sceptic. He believes firmly and devoutly in the realities of a supernatural world, and in his moral works he seeks to lay the foundations of a rational faith.

The primary aim of Kant's morality in its relation to his philosophy as a whole is to *complete teleology*. The design in the sensible world so far as it is revealed by nature proved on examination to be finite and justified the inference of merely a finite designer. Knowledge is bounded by sense, and if the *τέλος* is to be confined to the knowable we may give up the supersensual as mythical and fall back into a melancholy scepticism. But Kant when he looks into the moral nature of man finds there an end placed before him which in its scope penetrates the veil of sense into the supersensual and in the conditions of its fulfilment reaches onward to the infinite. To expose the nature, grounds, and implications of this end is the main purpose of his moral speculations.

Man, Kant affirms, must *act* as well as think. He is a practical as well as a theoretical being. He is determined to action by his *will*. Mind performing an act of knowledge is reason. Mind determining itself to action is *will*. Now just as in the pursuit of knowledge the mind must have an ideal before it as the spring and motive of its theoretical activity, so in action it must place before it as its motive a practical ideal. Drawing the parallel between man as a thinker and man as an actor thus far, Kant then dips down into consciousness and lays hold on the fact that the ideal of action *obliges* man to realize it. He has no option. To do or not to do is no question, for there is no alternative. He is obliged to *do*. The ideal of action presses him as an ideal of duty. It is a law which he is unconditionally bound to obey. This law not only enjoins obedience, but it places an end before man and commands its realization. That end is the *highest*, and the highest is perfection, practical or moral perfection. To call in question the obligation would be to repudiate the end, to deliberately resolve that the highest shall not be realized.

Unqualified obligation is a fact of consciousness, but it is an anomaly in a world of sense. The world of sense is limited; it can create impulses and inducements, but not obligations; its laws are qualified and hampered by conditions and limitations; its ends are relative and finite. It is clear that the world of sense is unable to create unqualified obligation. What then?

We must *postulate* something. First, in order that the unqualified law of duty may be valid man must be *free*. He must be free not only as transcending the laws of sense which is negative freedom merely, but as *subject to laws which transcend sense*. Negative freedom is consistent with mere lawlessness and could not account for the fact of obligation. But positive freedom presupposes law. If man is free in the positive sense, he not only transcends the laws of sense but is subject to supersensual laws. Spirit is free in the sense of being primarily subject to spiritual laws. Here then we discover the first rift in the veil of sense. Kant denies spiritual intuition. Mind cannot cognize itself as *essence* and, therefore, *free*. But in order that the moral law may not lose its binding power he postulates freedom, and thus freedom is found on examination to involve subjection to spiritual laws. But if spirit has laws of its own independently of sense, its existence is primarily independent of sense. Thus the fact of unqualified obligation furnishes the ground on which the human spirit rests the postulate of its own substantial reality. And the fact of obligation resolves into the minds recognition of the supremacy of its own laws over those of sense. *Secondly*, in order that the end which the moral law obliges us to pursue may be attainable we must postulate (a) the *continuity* or *immortality* of spirit. Freedom implies the substantial reality of spirit. The end placed before man by the moral law is not only a spiritual end, but it is *perfect*. In the speculative sphere we found the ideal of knowledge unattainable because it was a perfect (infinite) ideal, whereas the knowable is a finite quantity. But in the practical province there is an unavoidable obligation resting on us to realize the perfect end of the moral law. This is impossible in the present life. Hence we postulate the continuity of spirit, its survival of the death of the body, or the personal immortality of the human soul. (b) We must postulate the *existence of God*. The moral

end is the highest good, and this involves not only perfection of character on which the postulate of immortality is founded but the perfect *happiness* of the agent as the just reward of his obedience to the moral law. But nature and man, in so far as he is a moral being, are independent of each other. They are liable to collide, and they do collide in fact. These collisions are liable to interfere with and even to wreck the happiness of the moral agent. At the foundation of man and nature, therefore, as the First Cause of both we must postulate a Being who is capable of acting in accordance with the conception of this harmony between merit and reward, and who is capable of carrying his idea into execution, *i.e.* bringing man and nature into ultimate harmony and realizing the end of a perfect moral law. This Being must, in short, be both the *First* and *Final Cause* of all things. *From the First Cause of a finite effect we could only reach a finite being, but as the Author and Finisher of an infinite purpose through man and nature we are forced to postulate an infinite God.*

We thus reach a supersensual world and supersensual objects on moral grounds. But they are not secured as facts of knowledge. They are moral postulates. Man is placed in a dilemma. The moral law presses him with unqualified obligation. He is bound either to repudiate the law or assume the conditions of its fulfilment. But a moral being will say, Let the moral law be fulfilled tho the heavens should fall. Hence the necessity of postulating freedom, immortality, and God. They are moral necessities, but not known facts. And the fact that our conviction of their existence rests not on *cognitive* or *logical* grounds, but on *moral necessity*, distinguishes them as objects of *rational faith*.

While establishing a basis for belief, Kant does not repudiate his agnostic principles. The rational basis of his moral system is his doctrine of liberty. In his speculative philosophy Kant left the existence of freedom in doubt. It could not be cognized as a fact. We might entertain it as a hypothesis, but with the comforting assurance that it is unverifiable. Kant makes this speculative conclusion the starting-point of his moral philosophy. Freedom lies at the basis of his moral system not as a *proved fact* but as an *assumption*. But the fact that the validity of the moral law depends on the reality of freedom gives

us a strong moral reason for assuming it to be true. Kant is thus a consistent agnostic, but at the same time a rational believer.

III.—BASIS OF KNOWLEDGE.

Common-sense asserts that we know things as they are, and the religious consciousness asserts that we know God. Now philosophy can assume neither the truth nor the untruth of these judgments. Its function is to examine the foundations in order to ascertain what can be known. But if the final conclusions of philosophy are such as to confirm the judgments of the common consciousness of mankind, so much the better for both. The philosophical principles will gain a wider acceptance, and the tendency of speculative minds to regard consciousness as a mendacious witness will be cured. It would be both unfortunate and inexplicable were an ultimate contradiction to be found to exist between consciousness and truth. There are strong reasons at least for assuming that the philosophy which posits such a contradiction is defective in some of its principles.

Kantism posits such a contradiction between the thing of knowledge and the substantial reality as it exists apart from the cognitive act of the mind. This I apprehend to be the starting-point of most of Kant's agnostic conclusions. And the source of the contradiction is his failure to recognize the *perceptive* character of mind. To perceive is to thoroughly embrace and comprehend. A mind which is perceptive will thoroughly embrace and comprehend things. It will not from inherent weakness allow the thing to escape, and embrace a phenomenal substitute. In Kant's view, however, mind comprehends nothing but its own activity. It understands things so far as it *constitutes* them, but the element which is independent of its function, the impression of sense, is an unexplained and unexplainable residuum. It points to something back of the phenomenon as its ground; but since mind is not able to penetrate its *incognito*, no inference in regard to the nature of the background can be drawn. So the knowable thing is cut off from the real thing, and we are powerless to remedy the evil, altho painfully conscious that we have missed the substantial reality.

To see the evil and to remedy it are two different things. It is one thing to assert that we know things as they are, and quite another to show adequate grounds for the assertion. It seems to me that Descartes was right in deriving all knowledge from self-knowledge. Restating his principle so as to make it affirm that self-knowledge is not an inference from consciousness but the very voice of consciousness itself, we have a clue by which we can thread the universe of things and solve the agnostic contradiction. The consciousness of self from this point of view is no mere logical conception, but a direct apprehension of self as spiritual essence or principle. Suppose Kant had, like Descartes, made self-knowledge his starting-point, would he have stumbled into any distinction between phenomena and things in themselves? The thing in itself turns out to be the ground of the phenomenon, the reason for its existence. Back of the thing is its causality, or the reason for its existence. But reasons are spiritual facts, and Kant, who fails to apprehend spirit in man, as a consequence of this first incompetency fails to apprehend the reason of things. Beneath the world of things is a world of reasons. Separate the two and the former are phenomena, the latter things in themselves. Hume not only separated things from their reasons, but refused to acknowledge the *necessity* of reasons, making the appearance all in all. From the appearance he sought to deduce the so-called reality as a quasi-product, and so landed in a sensationalism which at root is thoroughly irrational. Kant restated against Hume the necessity of a rational foundation for what exists, but missing the clue of self-knowledge he was only able to assert that the relations of things exist because we *affirm* their existence, not that we affirm them because they exist. Had he taken consciousness as true self-knowledge, he would have been able to refer the judgments by which we affirm these relations to a perceiving mind or spirit. And this spiritual substance would have stood out as the ground of both the cognition and the objective relation perceived. A careful analysis of the causal judgment, as it is styled, reveals the fact that it is not a necessary inference but the positive affirmation of a fact. Its true test is self-evidence, and nothing but a *perceived fact* can be self-evident. But causality is a spiritual fact, and hence the causal

intuition is a perception of the spiritual basis of things in general. The apprehension of this basis brings the thing in itself within the grasp of knowledge. Consciousness thus enables us to reach a stand-point from which the contradiction between knowledge and reality disappears. The thing and its rational basis are both held in the iron grasp of apprehension, and agnosticism in the objective sphere falls to the ground.

In the sphere of spirit we are confronted by the questions of Freedom, Immortality, and God. In Kant's speculations the reality of the supersensual world is made to hinge on the question of freedom. And since freedom can neither be affirmed nor denied on speculative grounds, the question of its existence is left indeterminable. But in the moral nature of man facts are brought to light which without affecting the speculative evidence render it *morally obligatory to assume* freedom as a reality. If, however, consciousness is self or spiritual perception, the conditions are wholly changed. Freedom in its positive sense is equivalent to the possession of a constitution and laws not derived from sense. Now, consciousness decides that question by a *coup d'œil*. *If spirit is perceptive, consciousness is spiritual intuition, and the cognition of spirit as essence is the cognition of it as free.* For freedom in the sense of being subject to spiritual laws cannot be in question after the substantial reality of spirit has been ascertained.

With freedom as a known fact, morality no longer rests on a hypothesis. It rests on a basis of spiritual intuition. The law of obligation is a fact of consciousness, and freedom, which is its guarantee, is also known by intuition. The bearing of this on the existence of God is obvious. Kant postulates God as the necessary condition of the fulfilment of a *hypothetical law*. The validity of the law could not be established, for it depended on the question of freedom, of which no solution was possible. Hence it rested with men to decide in view of the practical interests involved whether the validity of the moral law should be affirmed or not. And on this decision hung the fate of the postulate of God's existence. But freedom is a fact of intuition, and the law has absolute validity in its own right. Man is a spirit, and the moral law is the law of his nature. He is therefore a being with an infinite destiny placed before him and

pressing him with unqualified obligation. The moral end of his being is as much a fact as his existence. Now, according to Kant's own principles, nature requires a First Cause adequate to its ascertainable scope. On the same grounds the spirit of man requires a First Cause adequate to its ascertainable scope. The *télos* of spirit is infinite. Therefore its First Cause is infinite. We thus reach on *logical* grounds, arguing from *moral facts*, the *knowledge* of a Being whose existence on Kantian grounds could only be held as the postulate of a rational faith.

In the light of the preceding, the relative value of the *theistic arguments* founded respectively on man and nature will not be hard to determine. Nature as a whole, so far as knowable, is finite and furnishes valid grounds for inferring merely a finite First Cause. The teleology in nature, so far as ascertainable, is also finite and leads to the same result. The evidence from nature is worthless to prove the *existence* of *God*. It proves nothing but a finite demiurge. But the case is different when we turn to man. Theologians have a fashion of slighting the Ontological proof. In so doing they fail to recognize their most impregnable stronghold. The Ontological proof, when truly apprehended, is an inference from the spirit in man to the existence of a Divine Spirit. Now, from the mere existence of the human spirit, which is finite, only a finite author can be inferred. The perception of this fact had its influence, no doubt, in inducing philosophers to desert the solid ground of intuition and found their Ontological proof on the *existence* of the *idea* of God in the mind. Against all such Kant's criticism is conclusive. The mere existence of an idea is no valid ground for concluding to the existence of its object. But if we go back of the idea and ascertain the *reason* of its existence we will discover a more solid ground for inference. Why should men conceive the First Cause of all things to be a Being infinitely perfect and Supreme in all his attributes? A little reflection will show that such a conception is the offspring of the moral nature of man. As a moral being he cannot conceive the Author of all things to be anything but Supremely Good and Great. And this necessity arises out of a cognition of the moral ends of his own being. The moral law sets an infinite end before him, and imposes on him an unqualified obligation to realize that end. The conception of

a *Supreme* Being springs directly from the *perception* of the *fact* that the Author of an infinitely perfect end must himself be infinite. Its true foundation is *moral teleology*, and moral teleology founded on intuition, not on a hypothesis, as Kant supposed, is as valid a basis for logical inference as the evidence of design in nature. The Ontological proof derives its cogency from the fact that instead of being a fine-spun creation of dialectical subtlety, it is a voice from the depths of the human spirit demanding a First Cause adequate to realize the destiny imposed on it by a perfect and inexorable moral law. And its value is enhanced by the fact that it is the only proof of God's existence that is logically sufficient. *From our own moral being we obtain data for concluding to the existence of an infinite First Cause; and having reached God through the spirit that is in man, we may go out into nature and discover his presence and agency in its constitution and laws.* For nature incompetent of itself to demonstrate the existence of the infinite is the "garment of God" to the mind whose knowledge of him rests primarily on other grounds.

Thus by starting with self-knowledge the agnostic wall is broken down and we are enabled to cognize truth and reality. Self-knowledge is a luminary from which the light proceeds in every direction. It sends forth a ray into the external world, and in the light of it we perceive the thing of knowledge and the thing in itself to be one. It turns its beams inward and exposes the substantial reality and moral freedom of the spirit of man. And man and nature unite in affirming as their First Cause a Being infinitely Great and Supremely Good.

A. T. ORMOND.

THE ANTIQUITY OF MAN AND THE ORIGIN OF SPECIES.

AMONG the numerous books and articles constantly inviting the attention of readers to the subjects of evolution and the antiquity and origin of man, some are rather of an argumentative and polemical character than of the nature of original investigation; others relate to new facts, and constitute actual contributions to the data of questions as yet too scantily supplied with fundamental truths. Of the former class many are interesting, able, and suggestive; but it is on work of the second class that the actual settlement of these disputes must depend, tho in the mean time this may be comparatively unknown to the general reader, whose ideas as to the present state of these questions are likely to be derived rather from the confident assertions and well-put arguments of popular writers than from the more solid tho less showy and far less startling and less assured conclusions of actual painstaking work.

Of works which may claim to contain results of original and useful investigation, the following, which are now in the hands of scientific men and embrace a very wide range of inquiry, may afford the material for profitable discussion in this REVIEW: Dawkins on "Early Man in Britain" is a work limited in its range, but embracing the results of the investigations of an acute observer, well up in the paleontology of the more recent formations. Barrande's "Brachiopodes," extracted from the great work on the Silurian System of Bohemia, is the production of the first paleozoic paleontologist of our age, and with regard to the group to which it relates, as well as to the cephalopods and trilobites previously treated by the author in the same manner, is an exhaustive inquiry as to what they have to say for and against evolution. "Les Enchaînements

du Monde Animal," by Gaudry, may be regarded as a popular book; but it is the work of one of the most successful collectors and expositors of the Tertiary mammalia. "Le Monde des Plantes," by Saporta, is also in some degree popular in its scope, but is replete with scientific facts admirably put together by a most successful and able paleo-botanist. Of the above writers Barrande is an uncompromising opponent of evolution as ordinarily held. In other words, he finds that the facts of the history of life in the Paleozoic period lend no countenance to this hypothesis. The others are theistic evolutionists, holding the doctrine of derivation with more or less of modification, but not descending to the special pleading and one-sided presentation of facts so common with the more advanced advocates of the doctrine. Perhaps we may most clearly present the salient points brought out in these works by noticing first the successive Tertiary periods and their life, culminating in the introduction of man, and secondly the facts as to the introduction of those earlier creatures which swarmed in the Paleozoic seas.

The Tertiary or Kainozoic period, the last of the four great "times" into which the earth's geological history is usually divided, and that to which man and the mammalia belong, was ingeniously subdivided by Lyell, on the ground of percentages of marine shells and other invertebrates of the sea. According to this method, which with some modification in details is still accepted, the *Eocene*, or dawn of the recent, includes those formations in which the percentage of modern species of marine animals does not exceed $3\frac{1}{2}$, all the other species found being extinct. The *Miocene* (less recent) includes formations in which the percentage of living species does not exceed 35, and the *Pliocene* (more recent) contains formations having more than 35 per cent of recent species. To these three may be added the *Pleistocene*, in which the great majority of the species are recent, and the *Modern*, in which all may be said to be living. Dawkins and Gaudry give us a division substantially the same with Lyell's, except that they prefer to take the evidence of the higher animals instead of the marine shells. The Eocene thus includes those formations in which there are remains of mammals or ordinary land quad-

rupeds, but none of these belong to recent species or genera, tho they may be included in the same families and orders with the recent mammals. This is a most important fact, as we shall see, and the only exception to it is that Gaudry and others hold that a few living genera, as those of the dog, civet, and marten, are actually found in the later Eocene. In the case of plants, as we shall find, Saporta shows that modern genera of land plants occur before the Eocene, in the last great group of the preceding period, and we have abundant American evidence of the same fact. As in the Mosaic narrative of creation, the higher plants precede by a long time the higher animals. The Miocene, on the same mammalian evidence, will include formations in which there are living genera of mammals, but no species which survive to the present time. The Pliocene and Pleistocene show living species, tho in the former these are very few and exceptional, while in the latter they become the majority.

With regard to the geological antiquity of man, no geologist expects to find any human remains in beds older than the Tertiary, because in the older periods the conditions of the world do not seem to have been suitable to man, and because in these periods no animals nearly akin to man are known. On entering into the Eocene Tertiary we fail in like manner to find any human remains; and we do not expect to find any, because no living species and scarcely any living genera of mammals are known in the Eocene; nor do we find in it remains of any of the animals, as the anthropoid apes for instance, most nearly allied to man. In the Miocene the case is somewhat different. Here we have living genera at least, and we have large species of apes; but no remains of man have been discovered, if we except some splinters of flint found in beds of this age at Thenay in France, and a notched rib-bone. Supposing these objects to have been chipped or notched by animals, which is by no means certain or even likely, the question remains, was this done by man? Gaudry and Dawkins prefer to suppose that the artificer was one of the anthropoid apes of the period. It is true that no apes are known to do such work now; but then other animals, as beavers and birds, are artificers, and some extinct animals were of higher powers than their modern

representatives. But if there were Miocene apes which chipped flints and cut bones, this would, either on the hypothesis of evolution or that of creation by law, render the occurrence of man still less likely than if there were no such apes. For these reasons neither Dawkins nor Gaudry, nor indeed any geologists of authority in the Tertiary fauna, believe in Miocene man.

In the Pliocene, as Dawkins points out, tho the facies of the mammalian fauna of Europe becomes more modern and a few modern species occur, the climate becomes colder, and in consequence the apes disappear, so that the chances of finding fossil men are lessened rather than increased in so far as the temperate regions are concerned. In Italy, however, Capellini has described a skull, an implement, and a notched bone supposed to have come from Pliocene beds. To this Dawkins objects that the skull and the implement are of recent type, and probably mixed with the Pliocene stuff by some slip of the ground. As the writer has elsewhere pointed out,¹ similar and apparently fatal objections apply to the skull and implements alleged to have been found in Pliocene gravels in California. Dawkins further informs us that in the Italian Pliocene beds supposed to hold remains of man, of twenty-one mammalia whose bones occur, all are extinct species except possibly one, a hippopotamus. This of course renders very unlikely in a geological point of view the occurrence of human remains in these beds.

In the Pleistocene deposits of Europe—and this applies also to America—we for the first time find a predominance of recent species of land animals. Here, therefore, we may look with some hope for remains of man and his works, and here, according to Dawkins, in the later Pleistocene they are actually found. When we speak, however, of Pleistocene man, there arise some questions as to the classification of the deposits, which it seems to the writer Dawkins and other British geologists have not answered in accordance with geological facts, and a misunderstanding as to which may lead to serious error. This will be best understood by presenting the arrangement adopted by Dawkins with a few explanatory notes, and then pointing out

¹ "Fossil Men," 1880.

its defects. The following may be stated to be his classification of the later Tertiary:

I. PLEISTOCENE PERIOD: the fourth epoch of the Tertiary, in which living species of mammals are more abundant than the extinct, and man appears. It may be divided into—

(a) *Early Pleistocene*, in which the European land was more elevated and extensive than at present (First Continental Period of Lyell), and in which Europe was colonized by animals suitable to a temperate climate. No good evidence of the presence of man.

(b) *Mid Pleistocene*. In this period there was a great extension of cold climate and glaciers over Europe, and mammals of arctic species began to replace those previously existing. There was also a great subsidence of the land, finally reducing Europe to a group of islands in a cold sea, often ice-laden. Two flint flakes found in brick earth at Crayford and Erith in England are the only known evidences of man at this period.

(c) *Late Pleistocene*. The land was again elevated, so that Great Britain and Ireland were united to each other and to the continent (Second Continental Period of Lyell). The ice and cold diminished. Modern land animals largely predominate, though there are several species now extinct. Undoubted evidences of man of the so-called "Paleolithic race," "River-drift and Cave men," "Men of the Mammoth and Reindeer periods."

II. PREHISTORIC PERIOD: in which domestic animals and cultivated fruits appear; the land of Europe shrinks to its present dimensions. Man abounds, and is similar to races still extant in Europe. Men of "Neolithic age," "Bronze age," "Prehistoric Iron age."

III. HISTORIC PERIOD: in which events are recorded in history.

I have given this classification fully, in order to point out in the first place certain serious defects in its latter portion, and in the second place what it actually shows as to the appearance of man in Europe.

In point of logical arrangement, and especially of geological classification, the two last periods are decidedly objectionable. Even in Europe the historic age of the south is altogether a different thing from that of the north, and to speak of the prehistoric period in Greece and in Britain or Norway as indicating the same portion of time is altogether illusory. Hence a large portion of the discussion of this subject has to be called by our author "the overlap of history." Further, the mere accident of the presence or absence of historical documents cannot constitute a geological period comparable with such periods as the Pleistocene and Pliocene, and the assumption of such a criterion

of time merely confuses our ideas. On the one hand, while the whole Tertiary or Kainozoic, up to the present day, is one great geological period, characterized by a continuous tho gradually changing fauna and series of physical conditions, and there is consequently no good basis for setting apart, as some geologists do, a Quaternary as distinct from the Tertiary period; on the other hand there is a distinct physical break between the Pleistocene and the Modern in the great glacial age. This in its arctic climate and enormous submergence of the land, tho it did not exterminate the fauna of the Northern Hemisphere, greatly reduced it, and at the close of this age many new forms came in. For this reason the division should be made not where Dawkins makes it, but at or about the end of his "Mid Pleistocene." The natural division would thus be:

I. PLEISTOCENE, including—

(a) *Early Pleistocene*, or First Continental period. Land very extensive, moderate climate.

(b) *Later Pleistocene*, or glacial, including Dawkins' "Mid Pleistocene." In this there was a great prevalence of cold and glacial conditions, and a great submergence of the northern land.

II. MODERN, or Period of Man and Modern Mammals, including—

(a) *Post-glacial*, or Second Continental period, in which the land was again very extensive, and Paleocosmic man was contemporary with some great mammals, as the mammoth, now extinct, and the area of land in the Northern Hemisphere was greater than at present. This represents the Late Pleistocene of Dawkins. It was terminated by a great and very general subsidence accompanied by the disappearance of Paleocosmic man and some large mammalia, and which may be identical with the historical deluge.

(b) *Recent*, when the continents attained their present levels, existing races of men colonized Europe, and living species of mammals. This includes both the Prehistoric and Historic periods.

On geological grounds the above should clearly be our arrangement, tho of course there need be no objection to such other subdivisions as historians and antiquarians may find desirable for their purposes. On this classification *the earliest certain indications of the presence of man in Europe, Asia, or America, so far as yet known, belong to the Modern period alone*. That man may have existed previously no one need deny, but no one can positively affirm on any ground of actual fact. I do not reckon

here the two flint flakes of Crayford and Erith already mentioned, because even if they are of human workmanship, the actual age of the bed in which they occur, as to its being glacial or post-glacial, is not beyond doubt. Flint flakes or even flint chips may be safely referred to man when they are found with human remains, but when found alone they are by no means certain evidence. The clays of the Thames valley have been held by some good geologists to be pre-glacial, but by others to be much later, and the question is still under discussion. Dawkins thinks they may be "Mid Pleistocene," equivalent to "Later Pleistocene" of the second table above, and that they are the oldest traces of man certainly known, but in the mean time they should evidently be put to what has been called "the suspense account."

Inasmuch, however, as the human remains of the post-glacial epoch are those of fully developed men of high type, it may be said, and has often been said, that man in some lower stage of development *must* have existed at a far earlier period. That is he must if certain theories as to his evolution from lower animals are to be sustained. This, however, is not a mode of reasoning in accordance with the methods of science. When facts fail to sustain certain theories we are usually in the habit of saying "so much the worse for the theories," not "so much the worse for the facts," or at least we claim the right to hold our judgment in suspense till some confirmatory facts are forthcoming.

Before leaving this part of the subject it may be well to remark the grand procession of mammalian life, beginning with the marsupial and semi-marsupial beasts of prey and low-browed and small-brained but gigantic ungulates of the Eocene and ending with man. There is here unquestionable elevation in rank, by whatever means effected. Gaudry inclines to some form of evolution, tho he piously refers it to the operation of the Creator. He thinks he can see traces of such evolution in the carnivorous animals, as derived from marsupials, and in the antelope and deer tribe, more especially in the development of horn and antler; and he traces the horse through a supposed ancestry of *hipparia*, etc., differing, however, from English and American evolutionists in making the *Paleotherium* the initial

link. This is, however, a matter of taste, as these genealogies may usually be traced with equal probability or improbability through any one of half a dozen lines. But in the case of some groups of animals, and these of the highest importance, he freely admits that derivation is at fault. The elephants and their allies the deinotheres and mastodons, for example, appear all at once in the Miocene period and in many countries, and they only dwindle in magnitude and numbers as they approach the modern. Gaudry frankly says: "D'où sont-ils venus, de quels quadrupèdes ont-ils été dérivés? Nous l'ignorons encore." The edentates, the rodents, the bats, the manatees are equally mysterious, and so are the cetaceans, those great mammalian monsters of the deep, which leap into existence in grand and highly developed forms in the Eocene, and which surely should have left some trace of their previous development in the sea. "We have," says Gaudry, "questioned these strange and gigantic sovereigns of the Tertiary oceans as to their progenitors, but they leave us without reply," and he goes on to refer to several things in connection with their habitat, their reproduction, and their dentition or want of it, which make their sudden appearance still more inscrutable. It is refreshing to find a naturalist who, while honestly and even enthusiastically seeking to establish the derivation of animals, gives due prominence to the facts which, in the present state of knowledge at least, refuse to be explained by his theory. The reader may note here that the appearance of man fully developed in the Modern period is parallel with that of the elephantine animals in the Miocene and the whales in the Eocene, as well as with a vast multitude of other cases which meet the paleontologist in every direction.

In the world of plants, Saporta has a strangely different story to tell, tho its general plan evidently harmonizes with the history of mammalian life. If we keep out of view the few species of small marsupials that exist in the Mesozoic period, mammalian life in all its grandeur comes into existence at a bound in the Eocene. But it had been preceded for at least one great geological period by a vegetation similar to that now living. It can scarcely be questioned that the vegetation of the older geological periods, however rank and abundant, was

not well suited to sustain the higher herbivorous animals. Accordingly no such animals are known in these periods. But in the cretaceous age we find in the lower beds of that series some coniferous plants of living genera, and in the upper cretaceous modern generic forms come in, both in Europe and America, in great force. We have magnolias, oaks, beeches, ivies, ginsengs, plane-trees, poplars, palms, and a host of familiar forms, and some of these so closely resembling existing species that it scarcely requires the eyes of an evolutionist to see in them the ancestors of our modern trees. Thus an ample and long-continued preparation was made not only for the introduction of mammalian life, but even for giving to the landscape its existing features. It seems indeed strange that no precursors of the Eocene mammals have yet been found in connection with these plant remains of the newer cretaceous. There is a gap here in animal life which we may expect at some time to be filled. There seems, however, notwithstanding the great changes in climate and physical geography, to have been much less change from the cretaceous onward in the plant world than in the world of higher animal life, so that Saporta can figure series of leaves of plants of modern genera from the Eocene upward, showing so little modification that they may in some cases be regarded as scarcely more than varietal forms, while some of the species have undoubtedly survived without change through all the long ages extending from the beginning of the Kainozoic to the present day. Plant-life is in this analogous to the lower animal life of the sea, which presents the same unchanged characteristics in Eocene and Modern species.

To return to primitive man and the date of his appearance in Europe, an important question is raised by Dawkins in the attempt which he makes to discriminate between two races of men supposed to have existed successively in Europe in post-glacial times or in the Second Continental period. These he calls respectively "men of the river gravels" and "cave men." The idea of such distinction seems to have arisen in his mind from the fact that in certain caverns in England the lowest stratum containing human remains affords only rude implements, while an upper stratum appears to testify to improved manufacture of stone tools and weapons, both strata being of

so-called "paleolithic" age ; that is, belonging to the time when certain mammalia now extinct survived. Such facts, however, would rather seem to testify to local improvement in the condition of certain tribes than to any change of race. Such local improvement would be very likely to occur wherever a new locality was taken possession of by a small and wandering tribe, which in process of time might increase in numbers and in wealth, as well as in means of intercourse with other tribes. A similar succession would occur when caves used at first as temporary places of rendezvous by savage tribes became afterward places of residence, or were acquired by conquest on the part of tribes a little more advanced, in the manner in which such changes are constantly taking place in rude communities. Yet on this slender foundation he builds an extensive generalization as to a race of river-drift men, in a low and savage condition, replaced after the lapse of ages by a people somewhat more advanced in the arts, and specially addicted to a cavern life ; and this conclusion he extends to Europe and Asia, finding everywhere and in every case where rude flint implements exist in river gravels, evidence of the earlier of these races. But his own statements are sufficient to show the baselessness of the distinction. He admits that no physical break separates the two periods ; that the fauna remained the same ; that the skulls, so far as known, present no differences ; and that even in works of art the distinction is invalidated by grave exceptions, which are intensified by the fact, which the writer has elsewhere illustrated, that in the case of the same people their residences in caves, etc., and their places of burial are likely to contain very different objects from those which they leave in river gravels. Perhaps one of the most curious examples of this, referred to by our author, is the cave of Duruthy in the western Pyrenees. On the floor of this cave lay a human skull covered with fallen blocks of stone. With it were found forty canine teeth of the bear and three of the lion, perforated for suspension, and several of these teeth are skilfully engraved with figures of animals, one bearing the engraved figure of an embroidered glove. This necklace, no doubt just such a trophy of the chase as would now be worn by a red Indian hunter, tho more elaborate, must have belonged to the owner of the skull,

who would appear to have perished by a fall of rock, or to have had his body covered after death with stones. In the deposit near and under these remains were flint flakes. Above the skull were several feet of refuse, stones, and bones of the horse, reindeer, etc., and "paleolithic" flint implements, and above all were placed several skulls and skeletons with "beautifully chipped" flint implements. After the burial of these the cave seems to have been finally closed with large stones. The French explorers of this cave refer the lower and upper skulls to the same race; but Dawkins, in consistency with his theory, has to consider the upper remains as "Neolithic," tho there is no conceivable reason why a man who possessed a necklace of beautifully carved teeth should not have belonged to a tribe which used well-made stone implements, or why the weapons buried with the dead should have been no better than the chips and flakes left by the same people in their rubbish-heaps.

The reasoning by which the author supports this distinction is throughout scarcely worthy of his reputation, and implies great carelessness as to modern analogies. The same remark may be made as to his identification of the cave men with the Esquimaux. What he says on this head would serve quite as well to identify them with other hunting and fishing people; with the Haidas of the Queen Charlotte Islands, for example, the Micmacs of Nova Scotia, or even the Fuegians. He exposes, however, the folly of the minute distinctions made by some French archæologists as to the ages of the remains in different caves, and which, as Lyell and others have insisted, prove no more than slight differences of wealth and culture among contemporary or immediately successive tribes.

Another point on which he well insists, and which he has admirably illustrated, is the marked distinction between the old paleocosmic men of the gravels and caves and the smaller race with somewhat differently formed skulls which succeeded them, after the great subsidence which terminated the Second Continental period and inaugurated the Modern epoch. The latter race he identifies with the Basques and ancient Iberians, a non-Aryan or Turanian people who once possessed nearly the whole of Europe, and included the rude Ugrians and Laps of the north, the civilized Etruscans of the south, and the Iberians

of the west, with allied tribes occupying the British Islands. This race, scattered and overthrown before the dawn of authentic history in Europe by the Celts and other intrusive peoples, was unquestionably that which succeeded the now extinct paleocosmic race and constituted the men of the so-called "Neolithic period," which thus connects itself with the modern history of Europe, from which it is not separated by any physical catastrophe like that which divides the older men of the mammoth age and the widely spread continents of the post-glacial period from our modern days. This identification of the Neolithic men with the Iberians, which the writer has also insisted on, Dawkins deserves credit for fully elucidating, and he might have carried it farther to the identification of these same Iberians with the Berbers, the Guanches of the Canary Islands, and the Caribbean and other tribes of eastern and central America. On these hitherto dark subjects light is now rapidly breaking, and we may hope that much of the present obscurity will soon be cleared away.

Another curious point illustrated by Dawkins, with the aid of the recent rediscovery of the tin-mines of Tuscany, is the connection of the Etruscans with the introduction of the bronze age into central Europe. This, when viewed in relation to the probable ethnic affinities of the Etruscans with the "Neolithic" and Iberian races, remarkably welds together the stone and bronze ages in Europe, and explains their intermixture and "overlap" in the earlier lake habitations of Switzerland and elsewhere.

We are also indebted to our author for a suggestion as to the linguistic connection of the Neocosmic and Modern periods, which is deserving the attention of philologists. He quotes from Abbé Inchaupré, the following Basque words:

<i>Aizcora</i>	= Axe	= Stone lifted up or handled.
<i>Aitzurra</i>	= Pick	= Stone to tear asunder.
<i>Aiztoa</i>	= Knife	= Stone, little or small.
<i>Azturrac</i>	= Scissors	= Little stones for tearing.

He remarks that all these words are derived from the word *aitza*, *atcha*, stone, tho now applied to implements of metal. The same thing occurs in many American languages, in which the word for stone, with appropriate additions, is applied to different kinds of tools. It is also curious that in some of the American languages the word for stone is almost identical with

that in Basque; but this applies to some other Basque roots as well. Still it is not unlikely that the onomatopoetic sounds, *itz*, *aitz*, and the like, applied to stones and cutting instruments in many languages, in all cases arose from the use of sharpened stones in cutting and rending.

A still more important speculation arising from the facts recently developed as to prehistoric men is the possible equivalency with the historical deluge of the great subsidence which closed the residence of paleocosmic men in Europe, as well as that of several of the large mammalia. Lenormant and others have shown that the wide and ancient acceptance of the tradition of the deluge among all the great branches of the human family necessitates the belief that, independently of the biblical history, this great event must be accepted as an historical fact which very deeply impressed itself upon the minds of all the early nations. Now, if the deluge is to be accepted as historical, and if a similar break interrupts the geological history of man, separating extinct races from those which still survive, why may we not correlate the two. The misuse of the deluge in the early history of geology, in employing it to account for changes that took place long before the advent of man, certainly should not cause us to neglect its legitimate uses, when these arise in the progress of investigation. It is evident that if this correlation be accepted as probable, it must modify many views now held as to the antiquity of man. In that case, the modern gravels spread over plateaus and in river valleys, far above the reach of the present floods, may be accounted for, not by the ordinary action of the existing streams, but by the abnormal action of currents of water diluvial in their character. Further, since the historical deluge cannot have been of very long duration, the physical changes separating the deposits containing the remains of paleocosmic men from those of later date would in like manner be accounted for, not by slow processes of subsidence, elevation, and erosion, but by causes of more abrupt and cataclysmic character. This subject the writer has referred to in previous publications,¹ and he is glad to see that prominence has recently been given to it by so good a geologist as the Duke of Argyll, in a late number of the *Contemporary Review*.

¹ "Origin of the World," "Fossil Men."

It is a great leap backward to pass from the bronze age of Europe to the Paleozoic brachiopods of Bohemia; but both may furnish illustrations of the same natural laws, as both belong to the same long-continued creative work. Barrande, like some other eminent paleontologists, has the misfortune to be an unbeliever in the modern gospel of evolution, but he has certainly labored to overcome his doubts with greater assiduity than even many of the apostles of the new doctrine; and if he is not convinced, the stubbornness of the facts he has had to deal with must bear the blame. In connection with his great and classical work on the Silurian fossils of Bohemia, it has been necessary for him to study the similar remains of every other country, and he has used this immense mass of material in preparing statistics of the population of the Paleozoic world more perfect than any other naturalist has been able to produce. In previous publications he has applied these statistical results to the elucidation of the history of the oldest group of crustaceans, the trilobites, and the highest group of the mollusks, the cephalopods. In his latest *mémoire* of this kind he takes up the brachiopods, or lamp-shells, a group of bivalve shellfishes, very ancient and very abundantly represented in all the older formations of every part of the world, and which thus affords the most ample material for tracing its evolution, with the least possible difficulty in the nature of "imperfection of the record."

Barrande, in the publication before us, discusses the brachiopods with reference, first, to the variations observed within the limits of the species, eliminating in this way mere synonyms and varieties mistaken for species. He also arrives at various important conclusions with reference to the origin of species and varietal forms, which apply to the cephalopods and trilobites as well as to the brachiopods, and some of which, as the writer has elsewhere shown, apply very generally to fossil animals and plants. One of these is that different contemporaneous species, living under the same conditions, exhibit very different degrees of vitality and variability. Another is the sudden appearance at certain horizons of a great number of species, each manifesting its complete specific characters. With very rare exceptions, also, varietal forms are contemporaneous with the normal form of their specific type, and occur in the same localities. Only in a very few cases do they survive it. This

and the previous results, as well as the fact that parallel changes go on in groups having no direct reaction on each other, prove that variation is not a progressive influence, and that specific distinctions are not dependent on it, but on the "sovereign action of one and the same creative cause," as Barrande expresses it. These conclusions, it may be observed, are not arrived at by that slap-dash method of mere assertion so often followed on the other side of these questions; but by the most severe and painstaking induction, and with careful elaboration of a few apparent exceptions and doubtful cases.

His second heading relates to the distribution in time of the genera and species of brachiopods. This he illustrates with a series of elaborate tables, accompanied by explanation. He then proceeds to consider the animal population of each formation, in so far as brachiopods, cephalopods and trilobites are concerned, with reference to the following questions: (1) How many species are continued from the previous formation unchanged? (2) How many may be regarded as modifications of previous species? (3) How many are migrants from other regions where they have been known to exist previously? (4) How many are absolutely new species? These questions are applied to each of 14 successive formations included in the Silurian of Bohemia. The total number of species of brachiopods in these formations is 640, giving an average of 45.71 to each, and the results of accurate study of each species in its characters, its varieties, its geographical and geological range, are expressed in the following short statement, which should somewhat astonish those gentlemen who are so fond of asserting that derivation is "demonstrated" by geological facts:

1. Species continued unchanged.....	28.	per cent.
2. Species migrated from abroad.....	7	"
3. Species continued with modification, ..	0	"
4. New species without known ancestors.	65	"
		100 per cent.

He shows that the same or very similar proportions hold with respect to the cephalopods and trilobites, and in fact that the proportion of species in the successive Silurian faunæ, which can be attributed to descent with modification is absolutely *nil*. He may well remark that in the face of such facts the origin of

species is not explained by what he terms "les élans poétiques de l'imagination."

The third part of Barrande's memoir, relating to the comparison of the Silurian brachiopods of Bohemia with those of other countries, tho of great scientific interest and important in extending the conclusions of his previous chapters, does not concern so nearly our present subject.

I have thought it well to direct attention to these memoirs of Barrande, because they form a specimen of conscientious work, with the view of ascertaining if there is any basis in nature for the doctrine of spontaneous evolution of species, and, I am sorry to say, a striking contrast to the mixture of fact and fancy on this subject which too often passes current for science in England, America, and Germany. Barrande's studies are also well deserving the attention of our younger men of science, as they have before them, more especially in the widely spread Paleozoic formations of America, an admirable field for similar work. In an appendix to his first chapter, Barrande mentions that the three men who in their respective countries are the highest authorities on Paleozoic brachiopods, Hall, Davidson, and De Koninck, agree with him in the main in his conclusions, and he refers to an able memoir by D'Archiac in the same sense, on the cretaceous brachiopods.

It should be especially satisfactory to those naturalists who, like the writer, have failed to see in the paleontological record any good evidence for the production of species by those simple and ready methods in vogue with most evolutionists, to note the extension of actual facts with respect to the geological dates and precise conditions of the introduction of new forms, and to find that these are more and more tending to prove the existence of highly complex creative laws in connection with the great plan of the Creator as carried out in geological time. These new facts should also warn the ordinary reader of the danger of receiving without due caution those general and often boastful assertions respecting these great and intricate questions, made by persons not acquainted with their actual difficulty, or by enthusiastic speculators disposed to overlook everything not in accordance with their preconceived ideas.

J. W. DAWSON.

THE HISTORICAL PROOFS OF CHRISTIANITY.

FIRST ARTICLE.

WRITERS on the evidences of Christianity, after some preliminary observations on natural theology, generally proceed at once to the subject of the genuineness and credibility of the gospels, for the obvious reason that in these books, if anywhere, is preserved the testimony to the facts connected with the life of Jesus. There are reasons, however, which have special force at present why this leading topic may well be postponed to a somewhat later stage of the discussion. Independently of the questions respecting the authorship and date of the New Testament narratives, there are weighty grounds for giving credence to the essential facts which form the ground-work of the Christian faith. It is important to remember that, besides these books, there are not wanting other memorials, written and unwritten, of the events about which we are concerned. We have Paul's Epistles, the most prominent of which are uncontested even by the sceptically disposed; the oldest of which—the first to the Thessalonians—was written at Corinth as early as the year 53. But, more than this, there are cogent proofs and there are strong probabilities, which may be gathered from known and conceded consequences of the life of Jesus among men. We can reason backwards. Even a cursory glance at Christianity in the course of its acknowledged history, and as an existing phenomenon standing before the eyes of all, is enough to convince everybody that something very weighty and momentous took place in Palestine in connection with the short career of Jesus. There followed, for example, indisputably, the preaching, the character, the martyrdom of the apostles. The church started into being. The composition of the gospels themselves, whenever and **by**

whomsoever it took place, was an effect traceable ultimately to the life of Jesus. How came they to be written? How did what they relate of him come to be believed? How came miracles to be attributed to him and not to John the Baptist and to Palestinian rabbis of the time? Effects imply adequate causes. The results of a movement disclose its nature. When we are confronted by historical phenomena, complex and far-reaching in their character, we find that no solution will hold which subtracts anything essential from the real historic antecedents. If we eliminate any of the conjoined causes, we discover that something is left unexplained. Moreover, the elements that compose a state of things out of which definite historical consequences proceed are braided together. They do not easily allow themselves to be separated from one another. Pry out one stone, and the entire arch will fall. It is a proverb that a liar must have a long memory. It is equally true that a historical critic exposes himself to peril whenever he ventures on the task of constructing a situation in the past, a combination of circumstances, materially diverse from the reality. Events as they actually occur constitute a web from which no part can be torn without being instantly missed. History, then, has a double verification: first, in the palpable effects that are open to inspection, and, secondly, in the connected relation, the internal cohesion, of the particulars that compose the scene. Let any one try the experiment of eliminating from the world's history any signal event, like the battle of Marathon, the teaching of Aristotle, or the usurpation of Julius Cæsar. He will soon be convinced of the futility of the attempt; and this apart from the violence that must be offered to direct historical testimonies.

Matthew Arnold tells us that "there is no evidence of the establishment of our Four Gospels as a Gospel Canon, or even of their existence as they now finally stand at all, before the last quarter of the second century."¹ I believe that this statement in both of its parts can be disproved; that the theory, at the basis of such views, of a gradual selection of the Four out of a larger group of competitive gospels, and of the growth of them

¹ "God and the Bible," p. 224.

by slow accretion, is a false one. It can be proved to rest on a misconception of the state of things in the early church, and to be open to other insuperable objections. But let the assumption contained in the quotation above be allowed, for the present, to stand. Such authors as Strauss, Rénan, Keim, notwithstanding their rejection of received opinions respecting the authorship and date of the gospels, do not hesitate to draw the materials for their biographies of Jesus from them. They undertake, to be sure, to subject them to a sifting process. We have to complain that their dissection is often arbitrary, being guided by some predilection merely subjective, or determined by the exigencies of a theory. Professing to be scientific, they are warped by an unscientific bias. But large portions of the evangelic narratives they admit to be authentic. If they did not do this, they would have to lay down the pen. Their vocation as historians would be gone. Now, then, we may see what will follow if we take for granted no more of the contents of the gospels than what is conceded to be true—no more, at any rate, than what can be proved on the spot to be veritable history. Waiving for the moment controverted questions about the origin of these books, let us see what conclusions can be fairly deduced from portions of them which no rational critic will consider fictitious. Having proceeded as far as we may on this path, it will then be in order to vindicate for the gospels the rank of genuine and trustworthy narratives, in opposition to the opinion that they are of later origin and compounded of fact and fiction.

I.

The known assertions of Jesus respecting his authority and office among men, if they are not well founded, imply either a lack of mental sanity or a deep perversion of character; but neither of these last alternatives can be reasonably accepted.

No one doubts that Jesus professed to be the Christ—the Messiah. This the apostles from the first, in their preaching, declared him to be. They went out preaching, first of all, that Jesus of Nazareth is the Messiah. It was on account of this claim that he was put to death. Before his judges, Jewish and Roman, he for the most part kept silent. Seeing that they were moved by passion and by purely selfish considerations, he

forbore useless appeals to reason and conscience. But he broke silence to avow that he was indeed the king, the "Son of God" —a familiar title of the Messiah.¹ It was held by the Jewish magistrates to be a blasphemous pretension.² He made it clear, then and at other times, what sort of a kingship it was which he asserted for himself. It was not a temporal sovereignty, "a kingdom of this world;" no force was to be used in the defence or extension of it. It was, however, a control far deeper and wider than any secular rule. He was the monarch of souls. His right was derived immediately from God. His legislation extended to the inmost motives of action, and covered in its wide sweep all the particulars of conduct. In the Sermon on the Mount he spoke with an authority which was expressly contrasted with that of all previous law-givers—"But *I* say unto you," etc.³ To his precepts he annexed penalties and rewards which were to be endured and received beyond the grave. Nay, his call was to all to come to him, to repose in him implicit trust as a moral and religious guide. He laid claim to the absolute allegiance of every soul. To those who complied he promised blessedness in the life to come. There can be no doubt that he assumed to exercise the prerogative of pardoning sin. Apart from declarations, uttered in an authoritative tone, of the terms on which God would forgive sin,⁴ he assured individuals of the pardon of their transgressions. He taught that his death stood in the closest relation to the remission of sins. The divine clemency towards the sinful is somehow linked to it. He founded a rite on this efficacy of his death—a part of his teaching which is not only recorded by three of the gospel writers, but is further placed beyond doubt by the testimony of the apostle Paul.⁵ He uttered, there is no reason to doubt, the largest predictions concerning the prospective growth of his spiritual empire. It was to be as leaven, as a grain of mustard-seed.⁶ The agency of God would be directed

¹ Matt. xxvi. 64, xxvii. 11, cf. vv. 29, 37; Mark xiv. 62, xv. 2, cf. vv. 9, 12, 18, 26; Luke xxii. 70, xxiii. 2, cf. vv. 2, 38; John xviii. 33, 37, cf. v. 39, xix. 3, 14, 19, 21.

² Matt. xxvi. 65; Mark xiv. 64.

³ Matt. v. 22, 28, 34, 39, 44.

⁴ Matt. v. 26, vi. 14, 15

⁵ 1 Cor. xi. 25.

⁶ Matt. xiii. 31-33; Luke xiii. 19-21.

to securing its progress and triumph. The government of the world would be shaped with reference to this end.

I have stated, in moderate terms, the claims put forth by Jesus. These statements, or their equivalent, enter into the very substance of the evangelic tradition. Not only are they admitted to be authentic passages in the gospels, but their historic reality is presupposed in the first teaching of Christianity by the apostles, and must be assumed in order to account for the rise of the church.

Let it be remembered that these pretensions are put forth by a person whose social position is that of a peasant. He is brought up in a village which enjoys no very good repute in the region around it. Among his fellow-villagers he has made no extraordinary impression. When he comes among them as a teacher, they refer to his connection with a family in the midst of them in a tone to imply that they had known of nothing adapted to excite a remarkable expectation concerning him.¹ For this passage in the gospel narrative bears indisputable marks of authenticity.

What shall be said of such claims, put forth by such a person, or by any human being? No doubt the first impression in such a case would be that he had lost his reason. If there is not wilful imposture, it would be said, there must be insanity. Nothing else can explain so monstrous a delusion. We have only to imagine that a young man who has always lived in some obscure country town presents himself in one of our large cities, and announces himself there, to his fellow-townsmen, and wherever else he can gain a hearing, as the Son of God, or Messiah; summons all, the high and low, the educated and ignorant, to accept him as a special messenger from heaven, to obey him implicitly, to break every tie which interferes with absolute obedience to him—to hate, as it were, father and mother, wife and children, for his cause. He proceeds, we will suppose, in the name of God to issue injunctions for the regulation of the thoughts even, as well as of external conduct, to forgive the sins of one and another evil-doer, and to warn all who disbelieve in him and disregard his commandments that retribution awaits them in the

¹ Matt. xiii. 55-57; Mark vi. 3, 4; Luke iv. 22.

future life. It being made clear that he is not an impostor, the inference would be drawn at once that his reason is unsettled. This, in fact, is the common judgment in such cases. To entertain the belief that one is the Messiah is a recognized species of insanity. It is taken as proof positive of mental aberration. This is the verdict of the courts. Erskine, in one of his celebrated speeches,¹ adverts to an instance of this kind of lunacy. A man who had been confined in a mad-house prosecuted the keeper, Dr. Sims, and his own brother, for unlawful detention. Erskine, before he had been informed of the precise nature of his delusion, examined the prosecutor without eliciting any signs of mental unsoundness. At length, learning what the particular character of the mental disorder was, the great lawyer, with affected reverence, apologized for his unbecoming treatment of the witness in presuming thus to examine him. The man expressed his forgiveness, and then, with the utmost gravity, in the face of the whole court, said: "I am the Christ." He deemed himself "the Lord and Saviour of mankind." Nothing further, of course, was required for the acquittal of the persons charged with unjustly confining him.

When it is said that claims like those of Jesus, unless they can be sustained, are indicative of mental derangement, we may be pointed, by way of objection, to founders of other systems of religion. But among these no parallel instance can be adduced to disprove the position here taken. Confucius can hardly be styled a religious teacher; he avoided as far as he could all reference to the supernatural. His wisdom was of man, and assumed no higher origin. A sage, a sagacious moralist, he is not to be classified with pretenders to divine illumination. Of Zoroaster we know so little that it is utterly impossible to tell what he affirmed respecting his relation to God. The very date of his birth is now set back by scholars to a point at least five hundred years earlier than the time previously assigned for it. Of him, one of the recent authorities remarks: "The events of his life are almost all enshrouded in darkness, to dispel which will be forever impossible, should no authentic historical records

¹ In behalf of Hadfield, indicted for firing a pistol at the king.

be discovered in Bactria, his home.”¹ A still later writer goes farther: “When he lived, no one knows, and every one agrees that all that the Parsis and the Greeks tell of him is mere legend, through which no solid historical facts can be arrived at.”² The history of the principal teacher of one of the purest and most ancient of the ethnic religions is veiled in hopeless obscurity. With respect to Buddha or Sakyamuni, it is not impossible to separate main facts in his career from the mass of legendary matter which has accumulated about them. But the office which he took on himself was not even that of a prophet. He was a philanthropist, a reformer. The supernatural features of his history have been grafted upon it by later generations. An able scholar has lately described Buddhism as “a religion which ignores the existence of God and denies the existence of the soul.”³ “Buddhism is no religion at all, and certainly no theology, but rather a system of duty, morality, and benevolence, without real deity, prayer, or priest.”⁴ Mohammed unquestionably believed himself inspired, and clothed with a divine commission. Beyond the ferment excited in his mind by the vivid perception of a single great, half-forgotten truth, we are aided in explaining his self-delusion—as far as it was a delusion—by due attention to the morbid constitutional tendencies which led to epileptic fits, as well as to reveries and trances. Moreover, there were vices of character which played an important part in nourishing his fanatical convictions; and these must be taken into the account. It is not maintained here that religious enthusiasm which passes the limits of truth should always raise a suspicion of insanity. We are not called upon by the necessities of the argument to point out the boundary-line where reason is unhinged. Socrates was persuaded that a demon or spirit within kept him back from unwise actions. Whether right or wrong in this belief, he was no doubt a man

¹ Haug, “Essays on the Laws, Writings, and Religion of the Parsis” (2d ed., Boston, 1868), p. 295.

² “The Zend-Avesta,” translated by J. Darmestetter, (Oxford, 1880); Int., p. lxxvi.

³ See Encycl. Britannica, art. *Buddhism*, by J. W. Rhys Davis.

⁴ Monier Williams, “Hinduism” (London, 1877), p. 74.

of sound mind. One may erroneously conceive himself to be under supernatural guidance without being literally irrational. But if Socrates, a mortal like the men about him, had solemnly and persistently declared himself to be the vicegerent of the Almighty, and to have the authority and the prerogatives which Jesus claimed for himself; had he declared just before drinking the hemlock that his death was the means or the guaranty of the forgiveness of sins, the sanity of his mind would not have been so clear.

Nor is there force in the objection that times have changed, so that an inference which would justly follow upon the assertion of so exalted claims by a person living now would not be warranted in the case of one living in that remote age, and in the community to which Jesus belonged. The differences between that day and this, and between Palestine and America or England, are not of a quality to lessen materially the difficulty of supposing that a man in his right mind could falsely believe himself to be the king and redeemer of mankind. The conclusive answer to the objection is that the claims of Jesus were actually treated as in the highest degree presumptuous. They were scoffed at as monstrous by his contemporaries. He was put to death for bringing them forward. Shocking blasphemy was thought to be involved in such pretensions. It is true that individuals in that era set up to be the Messiah, especially in the tremendous contest that ensued with the Romans. But these false Messiahs were impostors, or men in whom imposture and wild fanaticism were equally mingled.

Mental disorder has actually been imputed to Jesus. At the beginning of his public labors at Capernaum, his relatives, hearing what excitement he was causing, and how the people thronged upon him, so that he and his disciples could not snatch a few minutes in which to take refreshment, for the moment feared that he was "beside himself."¹ No doubt will be raised about the truth of this incident: it is a circumstance which no disciple, earlier or later, would have been disposed to invent.

¹ Mark iii. 21; cf. ver. 32. In ver. 21 *ἔλεγον* may have an indefinite subject, and refer to a spreading report which the relatives—*οἱ παρ' αὐτοῦ*—had heard: so Ewald, Weiss, *Marcusevangelium*, ad loc. Or it may denote what was said by the relatives themselves: so Meyer.

The Pharisees and scribes charged that he was possessed of a demon. According to the Fourth Gospel, they said: "He hath a demon, and is mad."¹ The credibility of the fourth evangelist here is assumed by Rénan.² In Mark, the charge that he is possessed by the prince of evil spirits immediately follows the record of the attempt of his relatives "to lay hold of him."³ Not improbably the evangelist means to imply that mental aberration was involved in the accusation of the scribes, as it is expressly said to have been imputed to him by his family. This idea of mental alienation has not come alone from the Galilean family in their first amazement at the commotion excited by Jesus, and in their solicitude on account of his unremitting devotion to his work. Nor has it been confined to the adversaries who were stung by his rebukes and dreaded the loss of their hold on the people. A recent writer, after speaking of Jesus as swept onward, in the latter part of his career, by a tide of enthusiasm, says: "Sometimes one would have said that his reason was disturbed." "The grand vision of the kingdom of God made him dizzy."⁴ "His temperament, inordinately impassioned, carried him every moment beyond the limits of human nature."⁵ These suggestions of Rénan are cautiously expressed. He broaches, as will be seen hereafter, an hypothesis still more revolting, for the sake of clearing away difficulties which his atheistic or pantheistic philosophy does not enable him otherwise to surmount. Yet he does, tho not without some signs of timidity, more than insinuate that enthusiasm was carried to the pitch of derangement. Reason is said to have lost its balance.

The words and conduct of Jesus can be considered extravagant only on the supposition that his claims, his assertions respecting himself, were exaggerated. His words and actions were not out of harmony with these claims. It is in these pretensions, if anywhere, that the proof of mental alienation must be sought. There is nothing in the teaching of Christ, there is nothing in his actions, to countenance the notion that he was dazed and deluded by morbidly excited feeling. Who can read the Sermon on the Mount and not be impressed with the per-

¹ *μαίνεται*, John x. 20.

⁴ "Lui donnait le vertige."

² "Vie de Jésus," 13^{me} ed., p. 331.

⁵ "Vie de Jésus," p. 331.

³ Mark iii. 22.

fect sobriety of his temperament? Everywhere, in discourse and dialogue, there is a vein of deep reflection. He meets opponents, and even cavillers, with arguments. When he is moved to indignation, there is the most complete self-possession. There is no vague outpouring of anger, as of a torrent bursting its barriers. Every item in the denunciation of the Pharisees is coupled with a distinct ground justifying it.¹ No single idea is seized upon and magnified at the expense of other truth of equal moment. No one-sided view of human nature is held up for acceptance. A broad, humane spirit pervades the precepts which he uttered. Asceticism, the snare of religious reformers, is foreign both to his teaching and his example. Shall the predictions relative to the spread of his kingdom and to its influence on the world of mankind be attributed to a distempered fancy? But how has history vindicated them! What is the history of the Christian ages but the verification of that forecast which Jesus had of the effect of his work, brief tho it was? Men who give up important parts of the Christian creed discern, nevertheless, "the sweet reasonableness" which characterizes the teaching and, equally so, the actions of Jesus. The calm wisdom, the inexhaustible depth of which becomes more and more apparent as time flows on—is that the offspring of a disordered brain? That penetration into human nature which laid bare the secret springs of action, which knew men better than they knew themselves, piercing through every disguise—did that belong to an intellect diseased?

If we reject the hypothesis of mental alienation, we are driven to the alternative of accepting the consciousness of Jesus with respect to his office and position as veracious, or of attributing to him a deep moral depravation. He exalts himself above the level of mankind. He places himself on an eminence inaccessible to all other mortals. He conceives himself to stand in a relation both to God and to the human race to which no other human being can aspire. It would be the wildest dream for any other human being to imagine himself to be possessed of the prerogatives which Jesus quietly assumes to exercise. Is this mere assumption? What an amount of self-igno-

¹ Matt. xxiii.

rance does it not involve! What self-exaggeration is implied in it! If moral rectitude contains the least guaranty of self-knowledge, if purity of character tends to make a man know himself and guard himself from seizing on an elevation that does not belong to him, then what shall be said of him who is guilty of self-deification, or of what is almost equivalent? On the contrary, the holiness of Jesus, if he was holy, is a ground for giving credence to his convictions respecting himself.

If there is good reason to conclude that Jesus was a sinless man, there is an equal reason for believing in him. It has been said even by individuals among the defenders of the faith that, independently of miracles, his perfect sinlessness cannot be established. "But where," writes Dr. Mozley, "is the proof of perfect sinlessness? No outward life and conduct could prove this, because goodness depends on the inward motive, and the perfection of the inward motive is not proved by the outward act. Exactly the same act may be perfect or imperfect according to the spirit of the doer. The same language of indignation against the wicked which issues from our Lord's mouth might be uttered by an imperfect good man who mixed human frailty with the emotion."¹ The importance of miracles as the counterpart and complement of evidence of a different nature is not questioned. It is not denied that if by proof demonstration is meant, such proof of the sinlessness of Jesus is precluded. Reasoning on such a matter is, of course, probable. Nevertheless, it may be fully convincing. How do we judge respecting any one whom we well know, whether he possesses this trait of character or lacks that? How do we form a decisive opinion, in many cases, with regard to the motives of a particular act or in respect to his habitual temper? It is by processes of inference precisely similar to those by which we conclude that Jesus was pure and holy. There are indications of *perfect* purity and holiness which exclude rational doubt upon the point. There are phenomena, positive and negative; which presuppose sinless perfection, which refuse to be explained on any other hypothesis. If there are facts which it is impossible to account for if moral fault is admitted to exist, then the existence of moral fault is disproved.

¹ Mozley, "Lectures on Miracles," p. 11.

It may be thought that we are at least disabled from proving the sinlessness of Jesus until we have first established the ordinary belief as to the origin of the gospels. This idea is also a mistake. Our impression of the character of Christ results from a great number of incidents and conversations recorded of him. The data of the tradition are miscellaneous, multiform. If there had been matter which, if handed down, would have tended to an estimate of Jesus in the smallest degree less favorable than is deducible from the tradition as it stands, who was competent, even if anybody had been disposed, to eliminate it? What disciples, earlier or later, had the keenness of moral discernment which would have been requisite in order thus to sift the evangelic narrative? Something, to say the least—some words, some actions or omissions to act—would have been left to stain the fair picture. Moreover, the conception of the character of Jesus which grows up in the mind on a perusal of the gospel records has a unity, a harmony, a unique individuality, a verisimilitude. This proves that the narrative passages which call forth this image in the reader's mind are substantially faithful. The characteristics of Jesus which are collected from them must have belonged to an actual person.

In an exhaustive argument for the sinlessness of Jesus, one point would be the impression which his character made on others. What were the reproaches of his enemies? If there were faults, vulnerable places, his enemies would find them out. But the things which they laid to his charge are virtues. He associated with the poor and with evil-doers. But this was from love and from a desire to do them good. He was willing to do good on the Sabbath; that is, he was not a slave to ceremony. He honored the spirit, not the letter, of law. He did not bow to the authority of pretenders to superior sanctity. Leaving out of view his claim to be the Christ, we cannot think of a single accusation that does not redound to his credit. There is no reason to distrust the evangelic tradition which tells us that a thief at his side on the cross was struck with his innocence and said, "This man hath done nothing amiss." The centurion exclaimed, "Truly, this was a righteous man!" Since the narratives do not conceal the insults offered to Jesus by the Roman soldiers, and the scoffs of one of the malefactors,

there is no ground for ascribing to invention the incidents last mentioned. But what impression was made as to his character on the company of his intimate associates? They were not obtuse, unthinking followers. They often wondered that he did not take a different way of founding his kingdom, and spoke out their dissatisfaction. They were not incapable observers and critics of character. Peculiarities that must have excited their surprise they frankly related: as that he wept, was at times physically exhausted, prayed in an agony of supplication. These circumstances must have come from the original reporters. It is certain that had they marked anything in Jesus which was indicative of moral infirmity, the spell that bound them to him would have been broken. Their faith in him would have been dissolved. It is certain that in the closest association with him, in private and in public, they were more and more struck with his faultless excellence. They parted from him at last with the unanimous, undoubting conviction that not the faintest stain of moral guilt rested on his spirit. He was immaculate. This was a part of their preaching. Without that conviction on their part, Christianity never could have gained a foothold on the earth.

It is not my purpose to dwell on that marvellous unison of virtues in the character of Jesus—virtues often apparently contrasted. It was not piety without philanthropy, or philanthropy without piety, but both in the closest union. It was love to God and love to man, each in perfection, and both forming one spirit. It was not compassion alone, unqualified by the sentiment of justice; nor was it rectitude, austere, unpitying. It was compassion *and* justice, the spirit of love and the spirit of truth, neither clashing with the other. There was a prevailing concern for the soul and the life to come, but no cynical indifference to human suffering and well-being now. There was courage that quailed before no adversary, but without the least ingredient of false daring and observant of the limits of prudence. There was a dignity which needed no exterior prop to uphold it, yet was mixed with a sweet humility. There was rebuke for the proudest, a relentless unmasking of sanctimonious oppressors of the poor, and the gentlest words for the child or the suffering invalid.

There is one fact which ought to remove every shadow of doubt as to the absolute sinlessness of Jesus. Let this fact be thoroughly pondered. He was utterly free from self-accusation, from the consciousness of fault; whereas had there been a failure in duty, his sense of guilt would have been intense and overwhelming. This must have been the case had there been only a single lapse—one instance, even in thought, of infidelity to God and conscience. But no such offence could have existed by itself; it would have tainted the character. Sin does not come and disappear like a passing cloud. Sin is self-propagating. Its first step is a fall and the beginning of a bondage. We reiterate that a consciousness of moral defect in such an one as we know that Jesus was, and as he is universally conceded to have been, must infallibly have betrayed itself in the clearest manifestations of conscious guilt, of penitence or remorse. The extreme delicacy of his moral sense is perfectly obvious. His moral criticism goes down to the secret recesses of the heart. He demands, be it observed, self-judgment: "First cast the beam out of thine own eye;" "Judge not." His condemnation of moral evil is utterly unsparing: the very roots of it in illicit desire are to be extirpated. He knows how sinful men are. He teaches them all to pray, "Forgive us our debts." Yet there is not a scintilla of evidence that he ever felt the need of offering that prayer for himself. From beginning to end there is not a lisp of self-blame. He prays often, he needs help from above, but there is no confession of personal unworthiness. Men generally are reminded of their sins when they are overtaken by calamity. The ejaculations of Jesus in the presence of his intimate associates, when he was sinking under the burden of mental sorrow, are transmitted—and there is no appearance whatever of a disposition on the part of disciples to cloak his mental experiences or misrepresent them—but not the slightest consciousness of error is betrayed in these spontaneous outpourings of the soul.

Let the reader contrast this unbroken peace of conscience with the self-chastisement of an upright spirit which has become alive to the obligations of divine law—the same law that Jesus inculcated. "Oh, wretched man that I am!" No language short of this corresponds to the abject distress of Paul. There are no bounds to his self-abasement: he is "the chief of sinners."

The burden of self-condemnation is too heavy for such conscientious minds to carry. Had the will of Jesus ever succumbed to the tempter, had moral evil ever found entrance into his heart, is it possible that his humiliation would have been less, or less manifest? That serene self-approbation would have fled from his soul. Had the Great Teacher, whose words are a kind of audible conscience ever attending us, and are more powerful than anything else to quicken the sense of obligation—had he so little moral sensibility as falsely to acquit himself of blame before God? It is psychologically impossible that he should have been blameworthy without knowing it, without feeling it with crushing distinctness and vividness, and without exhibiting penitence or remorse in the plainest manner. There was no such consciousness, there was no such expression of guilt. Therefore he was without sin.

We have said that there is nothing in the evangelic tradition to imply the faintest consciousness of moral evil in the mind of Jesus. A single passage has been by some falsely construed as containing such an implication. It may be worth while to notice it. To the ruler who inquired what he should do to secure eternal life, Jesus is said to have answered: “Why callest thou me good? there is none good but one, that is, God.”¹ There is another reading of the passage in Matthew which is adopted by Tischendorf, “Why askest thou me concerning the good? There is one,” etc.² This answer is not unsuitable to the question, “What good thing shall I do?” It points the inquirer to God. It is fitted to suggest that goodness is not in particular doings, but begins in a connecting of the soul with God. We cannot be certain, however, whether Jesus made exactly this response, or said what is given in the parallel passages in Mark and Luke (and in the accepted text of Matthew). If the latter hypothesis is correct, it is still plain that the design of Jesus was to direct the inquirer to God whose will is the fountain of law. He disclaims the epithet “good,” and applies it to God alone, meaning that God is the primal source of all goodness. Such an expression is in full accord with the usual

¹ Matt. xix. 17. Cf. Mark x. 18; Luke xviii. 19.

² τι με ἐρωτᾶς περὶ τοῦ ἀγαθοῦ;

language of Jesus descriptive of his dependence on God. The goodness of Jesus, tho without spot or flaw, was progressive in its development; and this distinction from the absolute goodness of God might justify the phraseology which he employed.¹ The humility which Jesus evinced in his reply to the ruler was not that of an offender against the divine law. Its ground was totally diverse.

There is a single occurrence narrated in the Fourth Gospel which may be appropriately noticed in this place.² Jesus said, "I go not up to this feast"—the "yet" in the authorized version forms no part of the text. "But when his brethren had gone up then he also went up, not openly, but secretly." Can anybody think that the author of the gospel, whoever he was, understands and means that his readers shall infer that the first statement to the brethren was an intentional untruth? It is quite possible that new considerations, not mentioned in the brief narration, induced Jesus to alter his purpose. This is, for instance, the opinion of Meyer.³ The expression, "I go not up," etc., may have been understood to signify simply that he would not accompany the festal caravan and thus make prematurely a public demonstration adapted to rouse and combine his adversaries. In fact he, did not show himself at Jerusalem until the first part of the feast was over. He partially travelled over Samaria. "My time," he had said to his brethren, "is not yet full come."

Complaints have been made of the severity of his denunciation of the Pharisees. Theodore Parker has given voice to this criticism. It is just these passages, however, and such as these which save Christianity from the stigma cast upon it by the patronizing critics who style it "a sweet Galilean version," and find in it nothing but a solace "for tender and weary souls."⁴ It is no fault in the teaching of Jesus that in it righteousness speaks out in trumpet-tones. There is no unseemly passion, but there is no sentimentalism. Hypocrisy and cruelty are painted in their proper colors. That retribution is stored up for the iniquity which steels itself against the motives to reform

¹ See Weiss, "Matthäusevangelium," ad loc.

² John vii. 8, 10, 14.

³ "Evang. Johannis," ad loc.

⁴ See Renan, "English Conferences," and *passim*.

is a part of the Gospel which no right-minded man would wish to blot out. It is a truth too clearly manifest in the constitution of things, too deeply graven on the consciences of men. The spotless excellence of Jesus needs no vindication against objections of this nature.

Were it possible to believe that, apart from the blinding, misleading influence of a perverse character, so monstrous an idea respecting himself as—supposing it to be false—gained a lodgment in the mind of Jesus, the effect must have been a steady, rapid moral deterioration. False pretensions, self-exalting claims, even if there is no deliberate insincerity in the assertion of them, distort the perceptions. They kindle pride and other unhealthy passions. The career of Mohammed, from the time when he set up to be a prophet, illustrates the downward course of one whose soul is possessed of a false persuasion of this sort. When the bounds that limit the rights of an individual in relation to his fellow-men are broken through, degeneracy of character follows. His head is turned. He seeks to hold a sceptre that is unlawfully grasped, to exercise a prerogative to which his powers are not adapted. Simplicity of feeling, self-restraint, respect for the equal rights of others, genuine fear of God, gradually die out.

If it be supposed that Jesus, as the result of morbid enthusiasm, falsely conceived of himself as the representative of God and the Lord and Redeemer of mankind, experience would have dispelled so vain a dream. It might, perhaps, have subsisted in the first flush of apparent, transient success. But defeat, failure, the desertion of supporters, will often awaken distrust even in a cause which is true and just. How would it have been with the professed Messiah when the leaders of church and state poured derision on his claims? How would it have been when his own neighbors among whom he had grown up chased him from the town? How, when the people who had flocked after him for a while, turned away in disbelief; when his own disciples betrayed or denied him; when ruin and disgrace were heaped upon his cause; when he was brought face to face with death? How would he have felt when the crown of thorns was put on his head? Would the dream of enthusiasm have survived all this? Would not this high-wrought self-confidence

have collapsed? Savonarola, when he stood in the pulpit of St. Mark's, with the eager multitude before him, and was excited by his own eloquence, seemed to himself to foresee, and ventured to foretell, specific events. But in the coolness and calm of his cell he had doubts about the reality of his own power of prediction. Hence, when tortured on the rack, he could not conscientiously affirm that his prophetic utterances were inspired of God. He might think so at certain moments; but there came the ordeal of sober reflection; there came the ordeal of suffering; and under this trial his own faith in himself was, to this extent, dissipated.

It must not be forgotten that from the beginning of the public life of Jesus to his last breath, the question of the reality of his pretensions was definitely before him. He could not escape from it for a moment. It confronted him at every turn. The question was, should men *believe in him*. The strength of his belief in himself was thus continually tested. It was a subject of debate with disbelievers. On one occasion—the historical reality of the occurrence no one doubts—he called together his disciples and inquired of them what idea was entertained respecting him by the people.¹ He heard their answer. Then he questioned them concerning their own conviction on this subject. One feels that his mood could not be more thoughtful, more deliberate. The declaration of faith by Peter he pronounces to be a rock. It is an immovable foundation on which he will erect an indestructible community. If Jesus persevered in the assertion of a groundless pretension, it was not for the reason that it was unchallenged. It was not cherished because there were few inclined to dispute it. He was not led to maintain it from want of reflection.

The foregoing considerations, it is believed, are sufficient to show that the abiding conviction in the mind of Jesus respecting his own mission and authority is inexplicable except on the supposition of its truth.

II.

The sinlessness of Jesus is in its probative force equivalent to a miracle: it establishes his supernatural mission; it proves his exceptional relation to God.

¹ Matt. xvi. 13-21.

We are now to contemplate the sinlessness of Jesus from another point of view, as an event having a miraculous character, and as thus directly attesting his claims, or the validity of his consciousness of a supernatural connection with God.

Sin is the disharmony of the will with the law of universal love. This law is one in its essence, but branches out in two directions, as love supreme to God and equal or impartial love to men. We have no call here to investigate the origin of sin. It is the universality of sin in the world of mankind which is the postulate of the argument. Sin varies indefinitely in kind and degree. But sinfulness in its generic character is an attribute of the human family. Rarely is a human being to be found in whom no distinct fault of a moral nature is plainly discernible. There may be here and there a person whose days have been spent in the seclusion of domestic life, under Christian influences, without any such explicit manifestation of evil as arrests attention and calls for censure. Occasionally there is a man in whom, even tho he mingles in the active work of life, his associates find nothing to blame. But in these extremely infrequent instances of lives without any apparent blemish, the individuals themselves who are thus remarkable are the last to join in the favorable verdict. That sensitiveness of conscience which accompanies pure character recognizes and deplores the presence of sin. If there are not positive offences, there are defects; things are left undone which ought to be done. If there are no definite habits of feeling to be condemned, there is a conscious lack of a due energy of holy principle. In those who are deemed, and justly deemed, the most virtuous, and in whom there is no tendency to morbid self-depreciation, there are deep feelings of penitence. "If we say that we have no sin we deceive ourselves, and the truth is not in us."¹ This is quoted here not as being an authoritative testimony, but as the utterance of one whose standard of character was obviously the highest. With such an ideal of human perfection, the very thought that any man should consider himself sinless excites indignation. One who pronounces himself blameless before God proves that falsehood and not truth governs his judgment.

What shall be said, then, if there be One of whom it can

¹ 1 John i. 8.

truly be affirmed that every motive of his heart, not less than every overt action, was exactly confirmed to the loftiest ideal of excellence—one in whom there was never the faintest self-condemnation or the least ground for such an emotion? There is a miracle; not, indeed, on the same plane as miracles which interrupt the sequences of natural law. It is an event in another order of things than the material sphere. But it equally presupposes divine intervention. It is equally to all who discern the fact, a proclamation of the immediate presence of God. It is equally an attestation that he who is thus marked out in distinction from all other members of the race, bears a divine commission. There is an exception to an otherwise invariable experience. There is a break in the uniform course of things, to which no cause can be assigned in the natural order. Such a phenomenon authorizes the same inference as that which is drawn from the instantaneous cure, by a word, of a man born blind.

On this eminence He stands who called himself the Son of Man. It is not claimed that this peculiarity of itself proves the divinity of Jesus. This would be a larger conclusion than the premises justify. But the inference is unavoidable, first, that his relation to God is altogether peculiar, and, secondly, that his testimony respecting himself has the attestation of a miracle. That testimony must be on all hands allowed to have included the claim to be the authoritative guide and the saviour of mankind.

GEORGE P. FISHER.

CRITERIA OF THE VARIOUS KINDS OF TRUTH.

IN respect of religious opinion the educated young men of this age may be described as *unsettled*. They cannot be represented as having deep convictions, yet they are not unwilling to listen to the claims of religion and of all kinds of it. They cannot be designated sceptics; the most of them resent it as a calumny when they are charged with being atheists or materialists, tho' numbers are cherishing views which are hurrying them on in this downward direction. They are not satisfied with the past, with its opinions or practices. They do not show any partiality for old creeds and confessions. Authority is not worshipped by them. They are bent on searching into the foundation of every belief, and therefore they would dig down deep, and are stirring up the rubbish and dust that stand in their way. They will not accept without first doubting and sifting even such truths, supposed to be long ago established, as the existence of God and the immortality of the soul and the essential distinction between good and evil. It is an age out of which good and evil, either or both, may come according as it is guided. We may cherish hope, for it is an inquiring age. We may entertain fears, for it is dancing on the edge of a precipice down which it may fall.

This age, like every other, is a transition one. Nothing here is abiding: the stream is ever flowing on; the present is hastening on to the future. The generation that now is will soon divide into two: one abiding in, or going back to, what will be very much the old faith, the other going on to a scepticism exceeding in boldness anything that has ever gone before. Somehow or other an old fisherman who lived eighteen hundred years ago, the same who anticipated the modern scientific doctrine

that the earth is to be burned up, had a fore-glimpse of this state of things: "There shall come in the last days scoffers walking after their own lusts, and saying, Where is the promise of his coming? for since the fathers fell asleep, all things continue as they were from the beginning of the creation." Meanwhile Pilate's question is being put—"What is truth?" Philosophers tell us that we have truth when our ideas are conformed to things. But can truth in this sense be found? This is the question eagerly put. Are there things to be known? or are our minds capable of knowing them? The extreme form in which this spirit embodies itself is Agnosticism—it used to be called Nescience, and the issue in which it lands us, Nihilism—and many are following it without knowing that they do so. It acknowledges with Hume that there are impressions and ideas, but without a mind impressed or entertaining the ideas; it admits with Kant phenomena in the sense of appearances; it believes in pleasures to be eagerly sought and avoided, but can find behind or beyond (or where it is to be found) in these no proof of a reality natural or supernatural. In such an age it may serve some good purpose to show that a certain amount of truth can be found, and that there are criteria which determine when we have found it.

Kant and the German metaphysicians have shown again and again that there is no one absolute criterion of truth to settle all truth for us; that will determine, for example, at one and the same time whether there is a fourth dimension of space, whether the planet Jupiter is inhabited, who is to be the next President of the United States, and what is to be the price of coal a year hence. But it can be shown that there are truths which can be ascertained, and that there are criteria which show when they are so, and these clear, sure, and capable of being definitely expressed. But the test which settles one truth does not necessarily settle all others or any others. It will be necessary to distinguish between different kinds of truth (and this is the merit of this article, if it has any); and we should be satisfied if we can find a criterion of each kind. It will be found that there are three kinds of truth, each of which has its own tests. The primary aim of the criteria, it should be noticed, is not to help us to discover truth, but to determine when we have discovered it.

I.—CRITERIA OF FIRST TRUTHS.

The mind must start with something. There are things which it knows at once. I know pleasure and pain. I do more: I know myself as feeling pleasure and pain. I know that I am surrounded with material objects extended and exercising properties. I know by barely contemplating them that these two straight lines cannot contain a space. These are called first truths. There must be first truths before there can be secondary ones; original before there can be derivative ones. Can we discover and enunciate these? I believe we can.

We are not at liberty, indeed, to appeal to a first principle when we please, or because it suits our purpose. When we are left without evidence, we are not therefore at liberty to allege that we need no evidence. When we are defeated in argument, we are not therefore to be permitted to escape by falling back on what is unproved and unprovable. It is true that we cannot prove everything, for this would imply an infinite chain of proofs every link of which would hang on another, while the whole would hang on nothing—that is, be incapable of proof. We cannot prove everything by mediate evidence, but we can show that we are justified in assuming certain things. We cannot prove that two straight lines cannot enclose a space, but we can show that we are justified in saying so. We can do so by the application of certain tests.

SELF-EVIDENCE is the primary test of that kind of truth which we are entitled to assume without mediate proof. We perceive the object to exist by simply looking at it. The truth shines in its own light, and in order to see we do not require light to shine upon it from any other quarter. We are conscious directly of self as understanding, as thinking, or as feeling, and we need no indirect evidence. Thus, too, we perceive by the eye a colored surface, and by the muscular touch a resisting object, and by the moral sense the evil of hypocrisy. The proof is seen by the contemplative mind in the things themselves. We are convinced that we need no other proof. A proffered probation from any other quarter would not add to the strength of our conviction. We do not seek any external proof, and if any

were pressed upon us we would feel it to be unnecessary—nay, to be an incumbrance, and almost an insult to our understanding.

But let us properly understand the nature of this self-evidence. It has constantly been misunderstood and misrepresented. It is not a mere feeling or an emotion belonging to the sensitive part of our nature. It is not a blind instinct or a belief in what we cannot see. It is not above reason or below reason; it is an exercise of primary reason prior, in the nature of things, to any derivative exercises. It is not, as Kant represents it, of the nature of a form in the mind imposed on objects contemplated and giving them a shape and color. It is a perception, it is an intuition of the object. We inspect these two straight lines, and perceive them to be such in their nature that they cannot enclose a space. If two straight lines go on for an inch without coming nearer each other, we are sure they will be no nearer if lengthened millions of miles as straight lines. On contemplating deceit we perceive the act to be wrong in its very nature. It is not a mere sentiment, such as we feel on the contemplation of pleasure and pain; it is a knowledge of an object. It is not the mind imposing or superinducing on the thing what is not in the thing; it is simply the mind perceiving what is in the thing. It is not merely subjective, it is also objective—to use phrases very liable to be misunderstood; or, to speak clearly, the perceiving mind (subject) perceives the thing (object). This is the most satisfactory of all evidence; and this because in it we are immediately cognizant of the thing. There is no evidence so ready to carry conviction. We cannot so much as conceive or imagine any evidence stronger.

NECESSITY is a secondary criterion. It has been represented by Leibnitz and many metaphysicians as the first and the essential test. This I regard as a mistake. Self-evidence comes first, and the other follows and is derived from it. We perceive an object before us and we know so much of its nature; and we cannot be made to believe that there is no such object, or that it is not what we believe it to be. I demur to the idea so often pressed upon us that we are to believe a certain proposition because we are necessitated to believe in it. This sounds too much like fatality to be agreeable to the free spirit of man. It is because we are conscious of self that we cannot be made to

believe that we do not exist. The account given of the principle by Herbert Spencer is a perverted and a vague one: all propositions are to be accepted as unquestionable whose negative is inconceivable. This does not give us a direct criterion, as self-evidence does, and the word inconceivable is very ambiguous. But necessity, while it is not the primary, is a potent secondary test. The self-evidence convinces us; the necessity prevents us from holding any different conviction.

UNIVERSALITY is the tertiary test. By this is meant that it is believed by all men. It is the argument from catholicity, or common consent—the *sensus communis*. All men are found to assent to the particular truth when it is fairly laid before them, as, for instance, that the shortest distance between two points is a straight line. It would not be wise nor safe to make this the primary test, as some of the ancients did. For, in the complexity of thought, in the constant actual mixing up of experiential with immediate evidence, it is difficult to determine what all men believe. It is even conceivable that all men might be deceived by reason of the deceitfulness of the faculties and the illusive nature of things. But this tertiary comes in to corroborate the primary test, or rather to show that the proposition can stand the primary test which proceeds on the observation of the very thing, in which it is satisfactory to find that all men are agreed.

Combine these and we have a perfect means of determining what are first truths. The first gives us a personal assurance of which we can never be deprived; the second secures that we cannot conquer it; the third that we can appeal to all men as having the same conviction. The first makes known realities; the second restrains us from breaking off from them; the third shows that we are surrounded with a community of beings to whom we can address ourselves in the assurance of meeting with a response.

But in order to be able to apply these criteria properly we must carry along with us certain explanations and limitations.

1. It should be noticed of intuitive truths that they are in the first instance *individual* or *singular*, and that we need to generalize the single perceptions in order to reach general maxims. In them we begin with contemplating a single object, say an external object and know it to be extended and solid, or an act

of benevolence and know it to be good, or an act of cruelty and proclaim it to be evil. But we can generalize the individual perceptions, and then we have general maxims or axioms, which we can apply to an infinite number of cases. We perceive that these two parallel lines will never meet; and we are sure that we should affirm the same of every other set of parallel lines, and hence we reach the general maxim that parallel lines will never meet. We perceive on the bare contemplation of this deed of deceit that it is base, but we would feel the same of every other deed of deceit, and hence the maxim deceit is evil. But it should be observed that in the formation of these general principles there is a discursive act in the shape of a generalizing process involved. It is here that there may creep in error, which is not in the intuitive but in the discursive process; for we may form a partial, a one-sided, or exaggerated generalization. Thus, on discovering a particular effect we at once judge or decide that it has a cause. But when we would make the principle universal we may fall into a mistake, and declare that "everything has a cause," which would require an infinite series of causes and make it necessary to hold that God himself has a cause. In such a case our generalization is wrong. But let the maxim take the form that "everything which begins to be has a cause," and we perceive that on a thing presenting itself to us as beginning we should proclaim it to have had a producing power. We thus see that there may be both truth and error in our metaphysical or moral maxims: truth in the primitive perception at the basis of the whole, but it may be hastiness leading to mutilation in the expression. Hence the wrangling in metaphysics. Thus, everybody acknowledges that two parallel lines can never meet, but there may be disputes as to the fit form in which to put the axiom. So, in regard to the generalized principles that every effect has a cause, that every quality implies a substance, that virtue is commendable; there may be a difficulty in expressing exactly what is meant by cause and effect, what by substance and quality, and what by virtue and moral good; and we may find that when we would make the expressions definite we fall into grievous mistakes, and this while we are certain that there is a self-evident, necessary, and universal truth if only we can seize it.

2. First truths are of various kinds, which we should endeavor to classify. Some of them are

Primitive Cognitions. In these the object is now before us, and is perceived by us. We perceive that this body has three dimensions in space, and cannot be made to believe otherwise. We decide that this thing, material or mental, cannot be and not be at the same time; that these two things, being each equal to the same thing, are equal to one another. In these cases the object is perceived at once and immediately. But there are others in which the object is not present, and the convictions may be regarded as

Primitive Beliefs. Here there is still an object. It is not present, but still it is contemplated. We have known the object somehow, and on conceiving it beliefs become attached to us. Thus, we know time in the concrete, and in regarding it we believe that time is continuous, that time past has run into time present, and that time present will run into time to come. A number of such faiths gather round our primitive cognitions and widen them indefinitely. We see two points in space; we are sure that there is space between, and that the shortest line between the two is a straight line. We can rise to still higher faiths. We believe of certain objects, say space and time, and God—when we come to know him as being infinite, that is—that they are always beyond our widest image or concept, and such that nothing can be added to or taken from them. The senses cannot give us these beliefs, nor can the understanding construct them out of the materials supplied by the senses. Some of them, such as the idea of the infinite, the perfect, lift us above our immediate experience into a higher sphere. We begin in all such cases with realities perceived or apprehended; and we are sure, if we proceed legitimately, that we end with realities. It should be remarked that in order to our having these cognitions and beliefs it is not necessary to express them or even put them in the shape of propositions. It is necessary first to have cognitions or beliefs regarding them before we form comparisons of them or affirm that they exist or possess certain properties. But out of these we can form

Primitive Judgments, in which we predicate—that is, make affirmations or denials—or discover certain properties or rela-

tions, as when we say space and time are without bounds and exist independent of the contemplative mind. In order that these judgments may be primitive they must be pronounced as to objects which have been perceived by intuition.

I ought here to add that the mind is capable of perceiving at once certain moral qualities, and we have

Moral Cognitions, Beliefs, and Judgments. On contemplating an act of self-sacrifice done for a friend or a good cause we know it at once to be good, or an act of selfishness we perceive it to be evil. When these acts are done by our neighbors we cannot notice them directly, but we are sure that they are good or evil; and these may be regarded as beliefs. When we put them in propositions we exercise judgment, as when we declare that sin deserves punishment.

3. The complexity of our mental states places difficulties in the way of our applying the criteria. There are opinions which have been acquired by a lengthened and constant observation, which association has wrought into our very nature, so that we feel as if they are native and necessary; and yet some of them may be mere hereditary or popular prejudices which have no warrant in reason. In particular, experiential truths or even fancies and prejudices may so mingle with our intuitions that it seems impossible to separate them and determine which is the self-evident principle in the complex notion. These circumstances, it should be admitted, do throw difficulties in the way of the application of our criteria. But these are not greater, after all, than the application of tests in any other department of knowledge, as, for example, chemical tests to determine the existence of poisons in very complex mixtures, and generally the verification of scientific discoveries of every description. But, in spite of these difficulties, the tests can be applied if only pains be taken to distinguish the things that differ, and to lay aside the things that are irrelevant. It is possible by a careful discrimination to separate the associated from the primitive judgment, and thus seize the conviction that is native and necessary and apply the tests to it.

4. In many instances it is essential to apply the tests to alleged intuitive truths before we put trust in them. In some cases, indeed, the spontaneous belief is so clear and assured that

we may follow it without instituting any reflex examination. But in other cases the supposed necessary truth may be mixed with extraneous matter which adulterates it. Every one acknowledges that for the purposes of accurate science it is of importance to have the axioms of mathematics and mechanics so enunciated that no empirical element has entered. In morals and jurisprudence evil consequences might arise from mixing up doubtful principles with true ones, from assuming, for instance, that the promotion of happiness is the sole and essential quality of virtue. Without a sifting we might often be tempted by indolence or prejudice to assume as true what ought to be proven, or what in fact cannot be proven. It is of special importance to apply these tests to all those higher faiths which perform so important a part in mystic philosophy and theology. In these there is commonly a real intuition, and this possibly of an elevating, inspiring order as a nucleus; but around this there may gather a halo consisting merely of mist irradiated by the light in the centre. All high minds have felt the influence of these faiths, and some have been transported by them. But earthly ingredients are apt to mingle with the ethereal and heavenward aspirations, and claim all the authority which these have. The gilding gold is made to give currency to the coin. Truth and error thus come to be hopelessly intermixed, and visions of fancy come to be regarded as revelations of heaven. The sceptic detects this, and in pulling up the tares he uproots the wheat; to vary our illustration, in tearing down the creepers he pulls asunder the wall on which they grow. These results are to be avoided by a reflex examination of the whole mental exercise. The idea of Plato, the ecstasy of the Alexandrians, the perfect of Descartes, Malebranche's vision of all things in God, the absolute of Kant, Schelling, and Hegel, the supposed inspirations of poets and the revelations to prophets who utter grand truths—all these point to and imply high realities. But they are liable to run into fancies and extravagances, into follies and deceptions, which delude and mislead those who believe in them, pervert their judgments, and render them ridiculous in the view of the world. There is gold in the mine, and all we have to do is by crucial tests to separate it from the dross that we may have the true metal.

Had our limits allowed I should have liked much to apply these tests to two works of ability recently published—Caird's "Philosophy of Religion" and Balfour's "Defence of Philosophic Doubt." The first of these is a Hegelian defence and exposition of religion. It is elevated both in style and thought, and will recommend Hegelianism (which has run and finished its course in Germany) to the British public more effectively than any other book written in the English tongue. The fault of the author is that of Hegel: he denies what he should have assumed, and assumes what he should have denied. Our tests would cut down a vast number of his principles and his reasonings. He represents intuitive or immediate conviction as purely empirical, whereas it is the primary exercise of reason. He asserts after the manner of the old Eleatics the unity of thought and reality, whereas thought affirming its own reality discloses a reality comprehensible by thought, but which is different from thought. He is perpetually assuming an absolute of which he does not condescend to give any intelligent account. He denies the logical validity of the argument from design for the existence of God, and thus undermines the old philosophic faith of Scotland, and gives us an argument from historical development which no shrewd Scotchman or American is likely to adopt. He insists after the manner of Hegel that truth is made up of contradictions. He reaches a refined rationalism different entirely from the evangelism hitherto preached in Scotland.

If Principal Caird errs by excess, Mr. Balfour errs by defect. It is not easy to determine the precise end he has in view. He is not to be regarded as a sceptic, least of all as a religious sceptic. His objections to all kinds of supposed truth are directed far more against boasted scientific certainty than religious faith. He has certainly been successful in showing that the objections taken by scientific men to religion apply with far greater force to their own dogmas. Some religious men are therefore rejoicing in what he has done. But it is somewhat perilous to make men doubt everything in order to shut them into some favorite tenets which they wish them to believe. They may thus be led into a bog from which they have no ability nor inclination to extricate themselves. He and his brother-in-law, Prof. Sidgwick, without being sceptics are the most successful men in our day

in starting doubts and difficulties. Mr. Balfour, whether sincerely or not I cannot say, represents our belief in truth, whether scientific or religious, as a vague and unreasoning instinct which the rising generation will regard as a poor defence against a reasoned scepticism. In this article I have carefully enunciated the canons of first truths, so as not to expose them to the cavils of Mr. Balfour, which are directed against representations of fundamental principles to which I am utterly opposed, and which cannot and should not be defended. By making self-evidence—that is, the perception of the thing—the primary test of fundamental truth we avoid his objections. He maintains that what we mean by ultimate is independent of proof. But we have shown that ultimate truths have their evidence in themselves in the realities perceived. He insists that when we say we believe we feel cold because consciousness tells us, and we believe in cause and effect because it is intuitive or *a priori*, the principle cannot be primitive, as it is represented as depending on something else. But in all such cases there is a mistake committed in the expression, often made, I admit, by metaphysicians, even by Hamilton, bringing in a reason or cause where there is none. We feel cold not *because* we are conscious of it; we believe in cause and effect not *because* it is intuitive or *a priori*. We perceive the cold at once, and believe that the effect has a cause by contemplating the effect; and there is no reason or cause, and the conviction is primitive. We call in the consciousness and intuition merely as criteria of what we have discerned directly.

II.—CRITERIA OF REASONED TRUTHS.

When we have got truth by self-evidence or by observation, we may add indefinitely to it by inference, in which we proceed from something given or allowed to something else derived from it by the mind contemplating it. If we have truth and reality in what we start with, and if we reason properly, we have also truth and reality in what we reach. Of course if what we assume be fictitious, what we arrive at may be the same. These inferences may be of three kinds, each of which has its tests.

IMMEDIATE INFERENCES, or what I am disposed to call *implied judgments*. Here we have a judgment given, and we

derive other judgments merely from contemplating the two notions compared. All general concepts, as logicians know, have both extension and comprehension. The extension has reference to the objects in the class; the comprehension to the qualities which combine them. Now, on the bare contemplation of the extension of the concepts we can draw certain inferences, as when it is granted that "all men have a conscience" we infer that "this man has a conscience" even tho he be a liar. From the same proposition we can draw the inference in comprehension that the possession of a conscience is an attribute of man. The canon is that whatever is involved in the extension and comprehension of a notion may be legitimately inferred.¹

MEDIATE REASONING.—Here we do not discover the relation of two notions, or as we call them when expressed in language, terms, by directly comparing them, but we can do so by means of a third term which has a connection with both. Reasoning thus consists in comparing two notions by means of a third. The canon of reasoning in its most general form is, "Notions which agree with one and the same notion agree with one another," with a corresponding dictum for negative reasoning. But the word "agree" is vague, and it is necessary to state

¹ From the proposition "men are responsible" the following may be drawn:

In Extension.

Every man is in the Class Responsible;
 This man is responsible;
 Some men are responsible;
 Every tribe of mankind are responsible;
 It is not true that some men are not responsible, etc., etc.

In Comprehension.

Man exists;
 Responsibility is a real attribute;
 Responsibility is an attribute of every man;
 Responsibility is an attribute of this man;
 Responsibility is an attribute of every tribe of men;
 Responsibility is an attribute of some men;
 Irresponsibility may be denied of all men;
 No man is irresponsible;
 Irresponsible beings are not men;
 Men of wealth are responsible with their wealth;
 To punish men is to punish responsible men.

See "The Laws of Discursive Thought: being a text-book of Formal Logic," by James McCosh, LL.D.

the nature of the agreement. This is done by two formulæ, which act as the criteria of reasoning.

The Dictum of Aristotle.—We have before us a crocodile, and wish to know how it brings forth its young. Our two terms are “crocodiles” and “bringing forth their young.” We find that it has been ascertained by science that the crocodile is a reptile, and that reptiles bring forth their young by eggs. We are now prepared to reason: “The crocodile, being a reptile, must bring forth its young by eggs.” Here we have three terms: two called the extremes, the original ones which we wish to compare, “crocodiles” and “bringing forth their young by eggs,” and a middle, “reptile,” by which we compare them. The process when expanded takes the form of two propositions, called the premises, and the conclusion drawn from them.

All reptiles bring forth their young by eggs;
 The crocodile is a reptile;
 Therefore it brings forth its young by eggs.

The conclusion is reached by the bare contemplation of the premises. The premises being true, the conclusion is true.

But this reasoning proceeds on a principle which it is desirable to have expressed and announced when it becomes the test of this kind of reasoning. It is, “Whatever is true of a class is true of all the members of the class.” What is true of reptiles generally is true of the reptiles called crocodiles, and of every individual crocodile. If we have not something that can be predicated—that is, affirmed or denied—of a class to constitute a premise, no conclusion can be drawn. Thus, if only some reptiles are oviparous, if only the greater number are so, we are not entitled to conclude that the crocodiles must be so. We have thus a very decisive and easily applicable test of reasoning.

In formal logic this governing principle is spread out in various forms, so as to enable us to apply the test to every case of ratiocination. First, the syllogism is found to be the universal form of mediate reasoning. Then logicians divide reasoning according to the position of the middle term, which is the nexus of the argument, and this gives four figures. I do not mean to unfold these; they are to be found in every treatise on elementary logic. All that I have to do is to show that thereby we have a criterion of ratiocination.

All this was established by Aristotle in his "Prior Analytics." A number of attempts have been made since his day to set aside his analysis or to improve upon it. None of these have met with anything more than a temporary success. But I am not convinced that the dictum of Aristotle is the regulating principle of all reasoning; it regulates only that reasoning which involves a general notion—that is, a class notion. It can be shown, I think, that there is a ratiocination which does not proceed on the principle of classes, but of identity or equivalence. Thus, we find that the stick A is equal to the stick B, and the stick B is equal to the stick C, and we conclude that the stick A is equal to the stick C. Here we have no classes or members of a class. The canon is, "Notions which are equivalent to one and the same third notion are equivalent to one another." In ratiocination of this description the subject of the propositions may be made the predicate, and the predicate the subject :

Shakespeare wrote "Hamlet;"
The writer of "Hamlet" is the greatest English poet:
Shakespeare was the greatest English poet.

All reasoning, in order to be valid, must fall under one or other of these rules, which are therefore the criteria of legitimate inference. When a professed argument cannot be brought under either of them, it is a proof that it is not reasoning. When, on endeavoring to bring it under them, we find that it is not in accordance with them, we may conclude that the inference is not valid.

Reasoning may take several forms, which are legitimate provided they are in conformity with the dictum of Aristotle or the principle of equivalents. The natural form in ordinary circumstances is the categorical, in which we lay down a general principle and bring a particular under it; as when we say, "Consumption is a fatal disease, and as this man has consumption he has a fatal disease;" or, not being sure of the fact, we say, "If this man has consumption he has a fatal disease." This reasoning is hypothetical, and is quite as valid as the categorical. Or the reasoning may take the disjunctive form: "This disease is either a severe cold or consumption. It is not a severe cold; therefore it is consumption."

The greater portion of the reasoning in mathematics is regu-

lated not by the dictum of Aristotle relating to classes, but the dictum of equivalence or equipollence.

III.—CRITERIA OF INDUCTIVE TRUTHS.

My purpose in the present article is not to show how truth is to be discovered, a subject which may be profitably discussed in the *Prolegomena* prefaced to the several sciences. I am simply to show that truth can be reached, and to give the marks which certify that it has been attained. I have given a brief exposition of the tests of intuitive truths and of reasoned truths. But there are branches of knowledge which have to deal from first to last and throughout with scattered facts. These become known in the first instance by the senses, external and internal. In the case of the bodily senses our observations are aided by such instruments as the telescope, the microscope, and the blow-pipe. The affections of the mind are revealed by consciousness aided by attention and analysis. The criterion in such cases is

The Testimony of the Bodily Senses and Self-Consciousness.—This is primarily of the nature of an intuition, the criteria of which have already been given. But it is to be remembered, what we have previously noticed when treating of first truths, that reasonings and even fancies are apt to mingle with our intuitions proper, and may perplex and mislead. In such cases we are carefully to separate all additions, illegitimate and legitimate, from the immediate perceptions of sense and consciousness. So far as they are fancies, they are simply to be cast aside. In some cases this is difficult, as there may be illusions to which we are naturally inclined by the laws of association. It is not easy in the multitude of our thoughts within us to specify our precise experience at any given time, and in the attempted description we may subtract or we may exaggerate. So far as the additions, or rather concomitants, are inferences, they may be tried by the tests of reasoning as given above. In viewing along the surface of the ocean a rock which actual measurement tells us is two miles off, we regard it as only a mile away; but in this we are drawing a wrong inference. By the eye we intuitively know only a colored surface; but we can come by experience to know distance, and we lay it down as a rule that when there are few things between us and an object that the object

must be near—a rule correct enough for ordinary use, but which may fail us in extraordinary circumstances. It is always possible with the proper pains to separate the perceptions of the senses from all adventitious circumstances, and to discover the truth pure and simple in the midst of the accretions.

But in all this we have only individual facts, which inform us of nothing beyond themselves. We have not as yet any means of anticipating the future from the past, or gathering wisdom from experience. In particular we have not as yet any science, which consists, not of individual and scattered and isolated facts, but of systematized knowledge. In order to have science we must co-ordinate the facts. We do so in order to discover *laws*—that is, the order that is in nature. In doing so we can discover truths of which we can now give the criteria. These are called the

Canons of Induction.

It should be observed that these do not guarantee to us absolute certainty, what is called apodictive truth or demonstration. None of these are certified, as first truths are, by the law of necessity; we can easily conceive any one of the ordinary physical laws not to be true universally, and we might believe so provided we have evidence. The evidence, after all, is merely a probability of a lower or higher degree, but may rise to a certainty only a little short of being absolute, and quite sufficient to justify us to put trust in it and act upon it in ordinary, indeed in all, circumstances. Such, for instance, is the proof which we have in favor of the law of gravitation. It is not demonstrative like a mathematical truth, but it satisfies the mind and is verified by constant observation. The doubts raised by Mr. Balfour in regard to scientific truths almost all derive their force from the circumstance that observation cannot reach all the facts and give us absolute certainty.

But the question arises, How from scattered facts do we reach a law which we may regard as universal? Most people, on the question being first put to them, would answer, By observing *all* the facts. But a moment's reflection suffices to show that in most cases, I believe in all, we cannot find out all the facts. Take the law, all mammals are warm-blooded, or that all matter attracts other matter inversely according to the square of the

distance; nobody has gone the round of the universe and noticed every mammal and every particle of matter, so as to be able from his own observation to say that no mammal is cold-blooded, and no particle of matter is without the power of attraction. But we can, notwithstanding, from a limited number of observations rise to a law which seems to be universal. The canons of induction determine for us when we have reached a law of nature.

There seem to be three grand ends which men of science have in view in their investigations. One is to discover the composition of the objects around us; the second is to discover natural classes; the third is to discover causes. There are canons which guide and guard us in each of these investigations.

I. Canons of Decomposition.—Almost all the objects we meet with in the world, whether material or mental, are composite. It is the aim of many departments of science, in particular of chemistry and psychology, to analyze them. This can so far be effectively done. There are certain rules to guide us, and these may be made more and more specific as the analytic sciences advance.

A. We must separate the object we wish to decompose from all other objects. If we wish to analyze water, we must have pure water separate from all other ingredients. If we wish to analyze intuition or reasoning we must separate it from all associated observations and fancies.

B. When we have found the composition of any piece or portion of a substance, we have determined the composition of every other part, and indeed of the whole. When we have ascertained that a pint of water is formed of hydrogen and oxygen, we have settled that water everywhere is composed of the same elements. This arises from the circumstance that every substance in nature has its properties which it retains. Having detected these properties in one case, we have found what they are in all.

C. The elements reached are to be regarded as being so only provisionally. We are not sure that in any cases we have found the ultimate elements of bodies. At present it is supposed that there are sixty-four elements, but we are not sure of any one of these that it will never be resolved into simpler substances. Meanwhile the chemical analysis is correct so far as it goes. It will always hold true that water is composed of oxygen and hydrogen, tho it is possible that oxygen or hydrogen, one or both, may be resolved into something simpler.

II. *Canons of Natural Classes*.—There are certain sciences which are called by Whewell classificatory. They are such as botany, zoology, and mineralogy. In these our aim is to arrange the objects in nature in classes lower and higher, such as species, genera, orders, and kingdoms. They are so arranged by their points of resemblance. There are canons which may assist us in determining when we have reached these classes.

A. We must have observed the resemblance in many and varied cases, say in different countries and at different times.

B. We must be in a position to say that if there had been exceptions we must have met them. These two rules guard against forming a law from a limited class of facts.

C. There are classes in nature called Kinds, in which the possession of one quality is a mark of a number of others. All classes entitled to be called natural are more or less of this description. Thus, mammals are so designated because they suckle their young, but this characteristic is a mark of a number of others: that the animals are warm-blooded and have four compartments in their hearts. Reptiles are recognized as producing their young by eggs, but they are also marked as having three compartments in the heart and being cold-blooded.

These canons guarantee truth. When we are able to place objects in a class we know that they possess the properties of the class.

III. *Canons of Causes*.—These determine for us when we have discovered the cause of any given phenomena. This subject was first systematically taken up by Bacon. He insisted on the careful observation of instances. But he knew that all instances are not of like value, and he found it needful to specify certain instances as of greater significance than others. These he called *prerogativa instantiarum*, and enumerates twenty-seven species of them, most of which are not applicable in the advanced stage of science we have now reached. It may be enough to give only one example, that of *instantia crucis*, the phrase being derived from the custom of placing a cross where two ways meet to guide the traveller. There are cases in which it is alleged that there may be one or other of two causes of the phenomenon. In these we should seek for a phenomenon which can be explained by the one and not by the other. Sir John Herschel has taken up the subject in his "Discourse on Natural Philosophy." But

the most lucid and upon the whole the clearest and most satisfactory exposition of these methods is by Mr. John S. Mill in his "Logic." It should be noticed that his methods relate to causes, and we have not had from him an exposition of the canons of decomposition and classes as given above. He mentions four or five methods.

A. The Method of Agreement.—In the spring season we see innumerable buds, leaves, and blossoms appearing upon the plants, and we find the common cause to be the heat of the sun shining more directly upon the earth. The canon is, "If two or more effects have only one antecedent in common, that antecedent is the cause, or at least part of the cause." That canon is too loose to admit of a universal application, as we may not be sure that the point of agreement we have fixed on is the only one.

B. The Method of Difference.—In the very middle of the day I find the scene around me on the earth suddenly darkened. There must be a cause. I find that the moon has come between us and the sun, and this seems the only difference between the two states—the one in which everything was bright, and the other in which it is in gloom. The canon is, "If in comparing one case in which the effect takes place and another in which it does not take place, we find the latter to have every antecedent in common with the former except one; that one circumstance is the cause of the former, or at least part of the cause." This method is the one employed in cases in which experiment with its separating power is available. It is the most decisive of all tests when the circumstances admit of its application. There are cases in which this method is not applicable, when a sort of intermediate one may come to our aid:

c. The Indirect Method of Difference, or the Joint Method of Agreement and Difference.—The canon is, "If two or more cases in which the phenomenon occurs have only one antecedent in common, while two or more instances in which it does not occur have nothing in common but the absence of that antecedent, the circumstance in which alone the two sets of cases differ is the cause, or part of the cause, of the phenomenon." The illustration given by Mr. Mill is: "All animals which have a well-developed respiratory system, and therefore aërate the blood, perfectly agree in being warm-blooded, while those whose res-

piratory system is imperfect do not maintain a temperature much exceeding that of the surrounding medium; we may argue from the two-fold experience that the change which takes place in the blood by respiration is the cause of animal heat."

D. The Method of Concomitant Variations.—We want to know the cause of the rise of water in a pump or of mercury in a barometer. The ancients accounted for this by nature's horror of a vacuum, which is inconsistent with the fact that water will not rise above a certain number of feet in the pump. Torricelli and Pascal gave a better explanation when they referred the rising of the water or mercury to the weight of the incumbent atmosphere, which Pascal proved by ascending a mountain with a barometer and finding that as he rose higher and higher the mercury fell lower and lower in the tube. Here we have the effect varying with its alleged cause, which is an evidence that the alleged cause is the true one. The canon is, "Whenever an effect varies according as its alleged cause varies, that alleged cause may be regarded as the true cause, or at least as proceeding from the true cause."

E. The Method of Residues.—A farmer knows how much grain a particular field has yielded in the past. He mixes manure with the earth on the field, and finds he has a larger crop, and he ascribes the increase to the manure. He knows what the previously existing antecedents will produce, and after subtracting this he ascribes the residue to the new antecedent. The canon is, "Subtract from an effect whatever is known to proceed from certain antecedents, and the residue must be the effect of the remaining antecedents."

I do not need here to give anything more than the above general account of these canons, which are fully unfolded by Mr. Mill. I mention them simply to show that when they are applied they settle for us what is truth.

Prof. Jevons, I am aware, has made a determined attack on them (*Contemporary Review*, vol. xxxi.). For fourteen years he had used Mr. Mill's works as partially his text-books in teaching, but now he has discovered that his philosophy is sophistical and false and doing immense injury; and in the reaction he has expressed himself strongly and passionately. I do not wonder that Mr. Jevons should speak thus of the metaphysics which underlies Mill's theory of induction. But his canons of causes

(he does not mention decomposition and classes) seem to me to be the best that have yet been expounded. Certainly Mr. Jevons has not given nearly so satisfactory an exposition of the methods of science in his elaborate work "The Principles of Science." I am not disposed to argue that Mr. Mill's version is perfect, or that it will never be modified as science enters new fields. I am inclined to think that there is special need of a logic adapted to those sciences in which there is a union of induction and deduction, particularly where there is the application of mathematics to laws discovered by observation. This is a field in which Prof. Jevons is fitted to labor with great success. The sciences which begin with induction and which, I believe, shall have to end with induction in the verification of the previous inductions, are becoming more and more deductive, and we have need of a theory and canons of what I call the Joint Inductive and Deductive Method, as practised in the social sciences and in the more recondite branches of physical sciences, in which mathematics have to be used as an instrument.

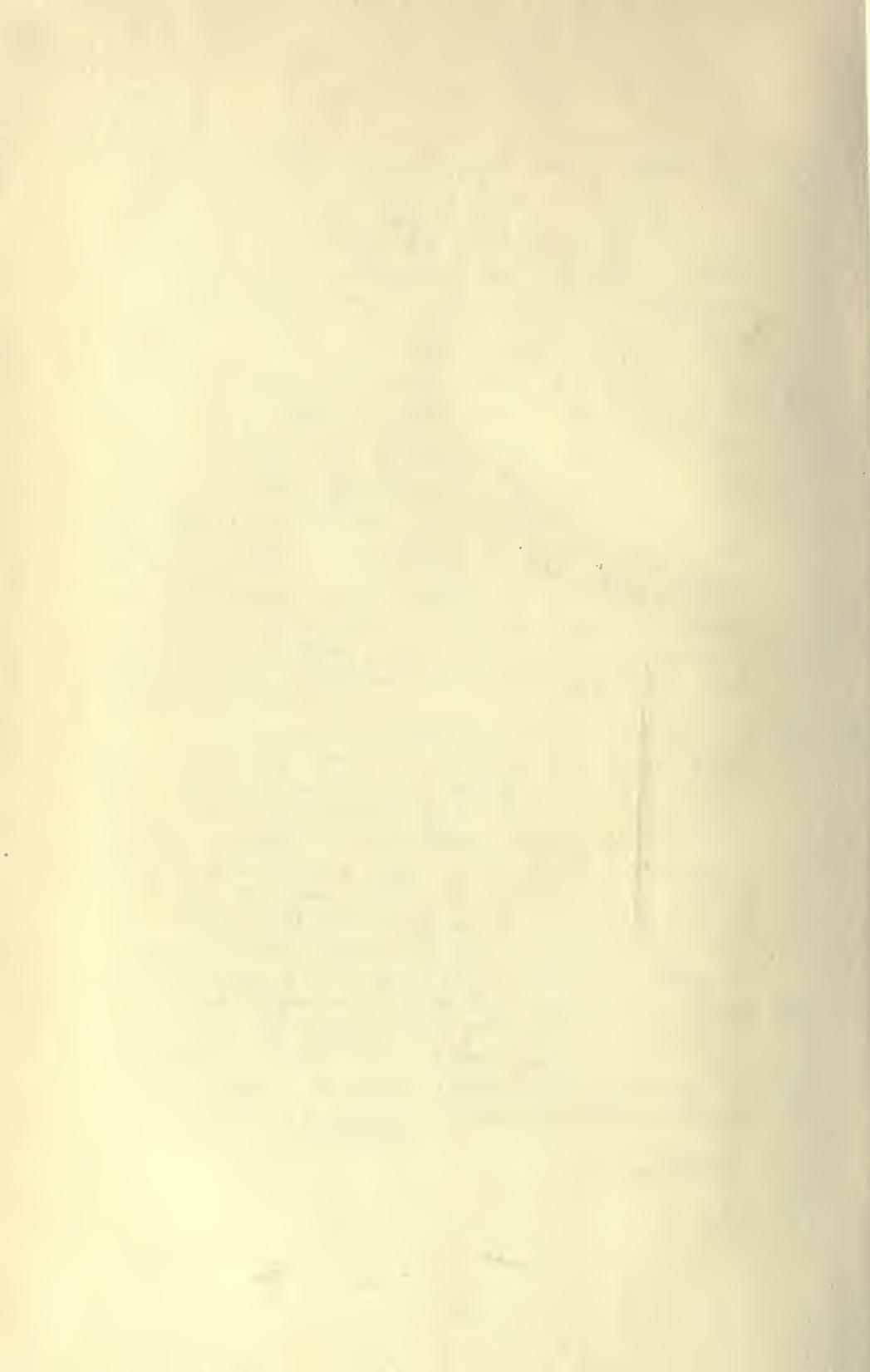
The canons of induction admit of an application to all the sciences which deal with scattered facts. Subsidiary rules, however, require to be added for each department of knowledge. There are, for instance, *Canons of Testimony*. In order to believe the report of a witness I must have reason to believe that he has means of knowing what he relates to be true. I must also have reason to believe that he is honest. Or, alternately, if I do not know him to be honest I must have reason to believe that he has no motive to deceive. Some other rules will also be followed: such as it is a good thing when the narrative is easy and natural; it is a good sign when it is consistent. Again, it is a bad sign when it is artificial, or when its consistency is a labored one. We use such guides as these in the common affairs of life, and we employ them in historical criticism.

These canons, as they determine what truth we can reach, also show how stringent are the limits laid on our researches and discoveries. Much as we know, there is evidently vastly more that we do not know, and probably infinitely more that we never can know in this world. "We know in part." Yes, we know, but we know only in part. We who dwell in a world "where day and night alternate," we who go everywhere accompanied by our own shadow—a shadow produced by our dark

body, but produced because there is light—cannot expect to be absolutely delivered from the darkness. Man's faculties, exquisitely adapted to the sphere in which he moves, were never intended to enable him to comprehend all truth. The mind is in this respect like the eye. The eye is so constituted as to perceive things within a certain range, but as objects are removed farther and farther from us they become more indistinct, and at length are lost sight of altogether. It is the same with the intellect of man. It can penetrate a certain distance and understand certain subjects, but as they stretch away farther they look more and more confused, and at length they disappear from the view. And if the human spirit attempts to mount higher than its limited range, it will find all its flights fruitless. The dove, to use a well-known illustration of Kant's, may mount to a certain height in the heavens; but as she rises the air becomes lighter, and at length she finds that she can no longer float upon its bosom, and should she attempt to soar higher her pinions flutter in emptiness, and she falters and falls. So it is with the spirit of man: it can wing its way a very considerable distance into the expanse above it, but there is a boundary which if it attempts to pass, it will find all its conceptions void and its ratiocinations unconnected.

Placed as we are in the centre of boundless space and in the middle of eternal ages, we can see only a few objects immediately around us, and all others fade in outline as they are removed from us by distance, till at length they lie altogether beyond our vision. And this remark holds true not only of the more ignorant, of those whose eye can penetrate the least distance; it is true also of the learned; it is perhaps true of all created beings that there is a bounding sphere of darkness surrounding the space rendered clear by the torch of science. Nay, it almost looks as if the wider the boundaries of science are pushed, and the greater the space illuminated by it, the greater in proportion the bounding sphere of darkness into which no rays penetrate, just as (to use a very old comparison) when we strike up a light in the midst of darkness, in very proportion as the light becomes stronger so does also that surface dark and black which is rendered visible.

JAMES MCCOSH.



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